

# **A Systems Analysis & Design Reader**

by  
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# DEDICATION

I would like to dedicate this book to all the people who helped me. People who help me in the start when i don't know that to do.

First, I like to thank God for giving me the strength, wisdom and knowledge to make this book.

Second is our professor sir. Paul Pajo who teaches us patiently and help us in some ways.

Third,I also want to thank my friends in helping me whenever i call for help.

And last, my family who is providing all my needs in doing this book. Without them i cant do this book.

# PREFACE

This book is a compilation of papers and presentations in systems analysis.

The Use cases, case studies and book review is submitted weekly, and the systems analysis and design paper or SAD is given after the first half of the term and should be completed before the end of the term. The case studies are all about the founders of a start up, you can learn from this because you can see how the ups and downs of their start ups. Use case is all about the study of different process and how you can improve them. In doing this i made use of

I hope this book may help other people by giving them informations. And also help them in their studies.

# **BOOK REVIEWS**

**Title of the Book:** Developing Software with UML  
(Object-Oriented Analysis and Design in Practice)

**Author:** Bernd Oestereich

**Reference No:** QA  
76.9  
035  
03713  
2002

The book *Developing Software with UML*, at first glance, is highly technical in nature as the title carries terms that are associated with the computer and systems development worlds. However, on closer scrutiny and evaluation, the book reveals a modular approach which can easily be understood even by those who are just starting it out with software development. The book's modular approach allows the reader to read from beginning to end or to hop from one topic to another.

The book starts with the quote from Schuldt: "Language is the dream we make from the world." Linking this quote with the book itself emphasizes the fact that software development indeed involves a special language that needs to be developed and enriched.

Chapter I of the book is basically dealing with the introduction on developing software with UML. The chapter explains the special features of object-oriented software development. The special features include the benefits of object-oriented software development with emphasis on the idea that the demands for software developments are rising. Further, it discusses the technical and social complexities of software development which include a discussion of the conceptual stability and evolution. The chapter also shows

that software development is not anymore a technical task as it is only one side of the truth but rather at present, software development is now becoming a complex social process.

Another important feature of the chapter is the inclusion of the history of Object-orientation. It discusses how the UML came about and the historical context of object-orientation and its analysis and design methods. A flowchart shows the historical development of object-oriented programming language.

Chapter I, the introduction also presented the difference between and among object-orientation from older methods like the Holistic approach and the Human-oriented approach.

The chapter also summarized the most important advantages of the object-orientation approach but with emphasis that object-orientation is not the ultimate solution. The approach does not always guarantee a hundred percent success and the approach according to the authors of the book will not necessarily prevent you from getting lousy results.

**Title of the Book:** Advanced Structured Analysis and Design

**Author:** Lawrence Peters

**Reference No:** QA  
76.9  
S84  
P48  
1989

Chapter I of the book Advanced Structured Analysis and Design is part of section 1 of this three-section book. This first chapter discusses in length the software lifecycle models which includes a definition of software lifecycles. A Software Lifecycle described the stages the software system goes through from birth to death.

Varied definitions of Software Lifecycles are also included in the early part of chapter I. However, the author was brilliant enough to combine the different meanings to form one meaning which will simplify one's understanding of what Software Lifecycle is. Peters defined it as a model, plan, or guide; activity or process oriented of use to both those managing the work and doing it.

The remaining parts of chapter I examine the four basic lifecycle models and introduce the role of the structured methods. These four basic lifecycle models are as follows:

- d. The "Slam Dunk" Lifecycle Model
- e. The Baroque Approach
- f. The Waterfall Approach
- g. The Prototyping Approach

Figures are included after a discussion of each approach for the readers to further understand the development or process that goes through each.

A lengthy discussion on lifecycles and the structured methods ends the chapter. It was explained that Structured Analysis and Structured Design have been used in conjunction with all the lifecycles and variations of them that have been discussed in the chapter. Further, the author states that the degree of success that different organizations have had in applying these concepts over the life of a software system depends on circumstances.



The different phases of the structured methods were also discussed and these are as follows: the Analysis Phase, the Design Phase, the Implementation Phase and the Maintenance Phase. Graphic models that presented the process and information flow for each phase are also included in the chapter.

The Analysis Phase presented the Physical model which involves an examination of the current system through an analysis of its physical properties and the Logical model which involves the abstraction or localization of the physical model into one which has had the mechanisms removed together with many physical details.

The Design Phase showed its goal which is the construction of a solution model and not necessarily the solution itself. The Design Phase proceeds through two primary stages namely Logical Design and Physical Design.

The Implementation Phase's goal is to implement the system according to the blueprint set down in the physical design phase.

The Maintenance Phase is a miniature development cycle and it combined the other three phases.

The relationship between the structured methods and the phases just described is presented through a figure towards the end of the chapter

**Title of the Book:** Object Oriented Systems Development (using the unified modeling language)

**Author:** Ali Bahrami

**Reference No:** QA  
76.9  
S88  
B33  
1999

Chapter I for the book, Object Oriented Systems Development presents an overview of the topic which is Object-Oriented Systems Development. The chapter's primary objectives include to define and to understand the object-oriented philosophy and why the readers need to study it. Further, chapter 1 presents the idea on the unified approach.

The introduction of the chapter presents a definition of software development. Software development is dynamic and always undergoing major change. The introduction part reminds the readers that the methods they will use in the future will differ significantly from those currently in practice. From this part of the book, I realized that the world of systems development is never stagnant and what is in practice today may be obsolete in the days to come.

The chapter also provides an overview of object-oriented systems development and discusses why we should study it. The unified approach is also a methodology discussed in this chapter as it is the methodology used in the book for learning about object-oriented systems development.

Oposing views of the software is also presented in the chapter. Object-oriented systems development is then differentiated from the traditional development techniques in the traditional techniques view software as a collection of programs or functions and isolated data. It is further stated that object-oriented systems development is based on functions and procedures.

The basic question answered in the chapter is "Why an object orientation?" according to the author, object-oriented methods enable the users or readers to create sets of objects that work together synergistically to produce software that better model their problem domains than similar systems produced by traditional techniques. Furthermore, the book states that the systems are easier to adapt to changing requirements, easier to maintain, more robust, and promote greater design and code reuse. Specific reason as to why objection orientation works were also enumerated and this include the following:

- 4 Higher level of abstraction
- 5 Seamless transition among different phases of software development
- 6 Encouragement of good programming techniques
- 7 Promotion of reusability

An overview of the Unified Approach is also presented. It was explained by the author of the book that it is organized around the unified approach for a better understanding of object-oriented concepts and system development.

The chapter highlighted that in an object-oriented environment, software is a collection of discrete objects that encapsulate their data and the functionality to model real-world “objects.”

## **Title of the Book: Systems Analysis and Design fifth edition**

Author: Shelly Cashman Rosenblatt

Call no: QA  
76.9  
S84  
S97  
2003

### Chapter 7

This book on Systems Analysis and Design is an interesting book that focuses on the different aspects of systems design. Chapter 7 in particular explains how to construct an effective user interface, design suitable input screens and procedures, and provide necessary output. The chapter further stresses the importance of user feedback and involvement in all design decisions.

Finishing chapter 7 means the readers would be able to explain the concept of user interface design and human-computer interaction, including the basic principles of user-centered design. Furthermore, the readers would be able to describe user interface techniques, including screen elements and controls. The readers would also be able to design effective source documents and input controls and design various types of printed reports and suggest output controls and security.

Chapter seven begins with user interface design concepts, including functions, layouts, and usability. The chapter also covers input procedures, controls, and formats. The chapter concludes with a discussion of output design, including printed reports and other system outputs.

Title of the Book: Systems Analysis and Design fifth edition

Author: Shelly Cashman Rosenblatt

Call no: QA  
76.9  
S84  
S97  
2003

## Chapter 8

Chapter 8 of the book Systems Analysis and Design is all about System Architecture. This is the final chapter in the systems design phase of the SDLC. This chapter describes system architecture, which translates the logical design of an information system into a physical blueprint, or architecture. This chapter of the book will help the reader plan the system architecture and they will learn about servers, clients, processing methods, networks and related issues.

After reading the chapter of this book, the readers will be able to provide a checklist of issues to consider when selecting a system architecture. As the chapter describes servers, server-based processing, clients, and client-based processing, the readers or users of the book will be able to explain client/server architecture, including tiers, cost-benefit issues, and performance considerations.

The chapter explains that System Architecture translates the logical design of an information system into a physical structure that includes hardware, software, network support, and processing methods. The end product of the systems design phase is the system design specification.

Title of the Book: Systems Analysis and Design fifth edition

Author: Shelly Cashman Rosenblatt

Call no: QA  
76.9  
S84  
S97  
2003

## Chapter 9

Chapter 9 deals about Systems Implementation. It describes the systems implementation phase of the SDLC. This chapter describes application development, installation, and evaluation.

This chapter lengthily discusses that during systems implementation, the reader will learn about application development, testing, documentation, training, data conversion, system changeover, and post-implementation evaluation of the results.

Further, the chapter discusses that the systems implementation phase, the system design specification serves as a blueprint for constructing the new system. The initial task is application development, which requires systems analysts and programmers to work together to construct the necessary programs and code modules.

The objectives of the chapter includes explaining the importance of software quality assurance and software engineering, describing the application development process, drawing a structure chart showing top-down design,

modular design, cohesion and coupling, explaining the coding process and how code is generated, and explaining unit testing, integration testing and system testing.

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S97  
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## Chapter 10

Chapter 10 of the book is about Systems Operation and Support. Chapter 10 describes systems operation and support tasks that begin after the systems become operational and continue throughout the useful life of the system. In addition to user support, this chapter discusses system maintenance, improvement, and performance measurement.

This chapter begins with a discussion of systems support, including user training and help desks. The four main types of maintenance: corrective, adaptive, perfective, and preventive are also discussed. The readers will also learn how the IT group delivers operational support including maintenance teams, configuration management, and maintenance releases. The readers will also examine system performance issues, maintenance fools, and how to recognize system obsolescence.

After finishing the chapter, the readers will be able to explain how the systems operation and support phase relates to the rest of the system development process, describe user support activities, including user training and help desks, discuss the four main types of system maintenance and explain techniques for managing systems operation and support, including maintenance



request procedures, configuration management, maintenance releases, version control and baselines.

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              76.9  
              S84  
              S97  
              2003

## Part 2

Case Tools is focused on by part 2 of the book. In this part, the Systems Analyst's Toolkit focuses on CASE tools which can help perform systems development and maintenance tasks.

Part 2 of the book is in supplement of the first chapter and it discusses in detail the CASE tools. They are software programs that system developers use to help them design and construct information systems. In this part of the Systems Analyst's Toolkit, the reader will learn about the history, characteristics, and features of CASE tools. Specific examples of CASE tools and how they are used in various development tasks are provided in the chapter.

This chapter explains CASE tools and the concept of a CASE environment. Traces history of CASE tools and their role in a fourth-generation environment, defines CASE terms and concepts, including a repository, modeling tools, documentation tools, engineering tools, and construction tools, explains an integrated development environment, provides examples of CASE tools features, and describes future trends for CASE tools including new developments and the emerging role of object-oriented analysis and design.

Title of the Book: Systems Analysis and Design fifth edition

Author: Shelly Cashman Rosenblatt

Call no: QA  
76.9  
S84  
S97  
2003

### Part 3

Part 3 of this book deals with Financial Analysis Tools. In this part, the readers will learn how to use financial analysis tools during the planning, analysis, design, implementation, and maintenance of an information system.

This part shows the readers how to use various tools to calculate a project's costs and benefits. As a systems analyst, the reader needs to know how to calculate costs and benefits when he/she conducts preliminary investigations, evaluates IT projects, and make recommendations to management. This chapter also stresses that financial analysis tools are important throughout the systems development cycle.

When the reader finishes this part, he would be able to define economic feasibility, classify costs and benefits into various categories, including tangible or intangible, direct or indirect, fixed or variable, and developmental operation, understands chargeback methods and how they are used, uses payback analysis to calculate the length of time that it takes for a project to pay for itself, uses return on investment analysis to measure a project's profitability, and uses present value analysis to determine the value of a future project measured in current dollars.

# **CASE STUDY**

## **CASE STUDY#1**

### **Reflection on the interview with Max Levchin, Cofounder, PayPal**

Reading the interview of Levchin by Livingston on how PayPal started made me realize a lot of things. First is that it is never easy to do a startup or to start on any business for that matter. It is full of uncharted waters so to speak but just like what Levchin did, he took courage and he got ready for every trial or obstacle that he will meet along the way. Another good thing about Levchin in his efforts to find something that would answer his desire to start a business is that he kept himself open to all possibilities and tried every opportunity he can get to really start something big.

Another thing I learned after reading the interview is that somebody who wants to do a startup should be flexible and sensitive to the needs of the consumers or the target market. Like Levchin who had plans about the startup but as he was not really sure of what he really wanted to focus on, he kept an open mind and became flexible about the plans and ideas that he has. Initially he was into developing software for handheld devices but he was also into security and a lot of other things which he thinks would be good. He considered the needs of the present time and the needs of the target consumers hence he and his partners came up with what would be more successful and that is the

idea behind the creation of the PayPal setup.

The third thing I learned in doing a startup or in starting a business is that it is important that somebody believes in you and that you have somebody you can trust as you startup something. Just like in the case of Levchin. He had Peter who believed in him and in his ideas. Levchin himself said that it is important to have a good cofounder. He said further that starting up is all about people and that if you are doing it alone, it will really be very hard. I think the key idea here is that if you are with someone good and with someone you really can trust, you know that as you go on with your plans, there would be somebody to honestly tell you if you are doing well or if you are doing badly.

Reading all about Max Levchin and how he founded PayPal made me realize that starting a business is just like living life. There are a lot of obstacles we have to conquer to emerge successful.

## **CASE STUDY #2**

### **Dan Bricklin**

Cofounder, software arts

Daniel S. Bricklin is the co-creator, with Bob Frankston, of the VisiCalc spreadsheet program. He also founded Software Garden, Inc., of which he is currently president, and Trellix Corporation, which is currently owned by Web.com. I think I learned in his story is that friendship is always important in doing things and friendship can be a good help in doing business because if you are close with the person you work with arguments will be lessened and you will understand each other and the work will be equally divided. Second is that we can develop things in our field like what Dan and Bob did they created an application that will help them do their job easily. Many people will benefit from what they did. Third thing I've learned is we should be careful in things because some disagreements may lead to a bad result in business. We should take all into consideration the things that are happening. I also learned that great things that come in a flash can be gone in just a second if you don't take good care of it.

## **CASE STUDY#3**

Mike Lazaridis  
Cofounder, Research in Motion

Mike Lazaridis and his friend Dough Fregin founded RIM while their still in college. Both of them studied at University of Waterloo. Their first project is a local area network and before finishing their studies they landed a big contract which earned them \$600,000.

One thing I learned from the story of Mike and Dough is you can make a good business even if you are still studying just what like they did. They took advantage of what they have. They just learn how to use the machines. Because they have a lot of resources and their school is more focused on computers.

I like the part of the story when they say you got to have faith in what you think and going to do. They say that you have to believe that it is going to happen, it has a value and you can accomplish it. I really believe what they said.

I learned also that the place is not really a big deal in education. The important thing is that you have a good resources and the school where you are studying has the highest level of education.

## **CASE STUDY#4**

### **Steve Wozniak**

Cofounder, Apple Computer

The story of Steve Wozniak is very exciting and interesting. He made computers in his own simple way. Steve is not business minded person, his not so interested in making money. Steve loves to create things and to do his job. The first thing I've learned is that even though you don't have enough money to buy the things you need in doing something you can still make a way if you really want to do it like Steve Wozniak did. Second is, that even we want to do what we always wants its still has a chance to change. For example I only want to programs and then I learned how to make a video game its not always program I should be open and should not close the doors for other opportunities. The third thing I learned is we need to value money a lot because, sometimes in a small amount of money we can create or build great things if we have a vision and good ideas.



## **CASE STUDY#5**

### **Tim Brady**

First Non-founding employee  
YAHOO

It was Jerry Yang and David Filo who started Yahoo in 1994. First it was just as a collection of links to research papers in Stanford. Then Jerry and David added links to new types of information then suddenly the site rapidly.

Brady is Yang's college roommate in that time he is taking his MBA at Harvard business school. Brady always wanted to finish his studies but Yang told him about Yahoo so he decided to just pass his requirements to his professors and join Yang in making Yahoo a good business.

One thing I've learned in this story is that things could happen even if you don't intend to do it. It's like your doing something and your not expecting that thing has a great potential and that thing could be big. You just have to take advantage of what you have made. Learn how to make that thing grow.

Another thing I've learned is you don't have to be scared of your competitors but or course you have to think of them as well. Just like what Filo did instead of showing a result like "it's not here" he put links to their competitors and it may sound stupid but for the people they would take it in a positive way. The people will think that Yahoo is just doing what could possibly do just to get what the people is looking for.

I also learned in this story and in the other case studies I read is friendship can help a lot in doing business because if you are close with the people you work with you trust them a lot and trust is very important in business. The flow of communication is very good because you are comfortable already with the people you are working with.

## **CASE STUDY#6**

### **Topic: Steve Perlman, Cofounder, Web TV**

The story of Steve Perlman is not new in a sense that just like any other startup story read in the class, Perlman started with a vision. Back in 95, he was interested in making television interactive. It something beyond just changing channels up and down. He wanted to do a lot of things back then and these ideas that he had that time were basically all new. But he had a vision and he went on to pursue this vision into reality.

Work hard. That was truly remarkable on the part of Steve Perlman. He and his team reverse-engineered four video games namely NBA Jam, Mortal Kombat, a hockey game and some other one. He and his team did it in six months. They worked round the clock. Perlman would typically not sleep for 2 days then would just get sleep for four hours and go back to work again. It was the hardest he had ever worked but that taught me a great deal in putting much effort to something I would want to accomplish. Hard work truly pays off.

Another thing I learned from Steve Perlman is that he takes matters into his own hands—into his team hands that is. Because when they took in some people to get their network software working and these people just did not deliver, they pulled it in and did it themselves. He didn't allow the situation to gets worse. He made sure that what they had to accomplish they truly accomplished. It was really hard work on Perlman's side of the ball game.

Perlman learned about working with people and this too I realized is important. Perlman cofounded the project with somebody and it didn't work out between them. Their perspective of where to take the company from that point were different and that was the time he realized that cofounding something is like a marriage. You have to have a similar kind of perspective on where you are going to take the thing. I realized the value of being one with a partner in staring projects such as this one started out by Perlman. It takes two to tango as the old saying goes. It is important that I work with somebody with whom I share the same vision.

Liket what Perlman realized, when he was not really getting along with the partner, he moved on. There is no use sticking it out with somebody who does not share the same vision because both of them will just go nowhere. What I

learned about this is that once you figured out that there wasn't much in common as to where you would want to take the company, it would be better to part ways. Move on and continue what each of you thinks is right on your own separate ways.

The story of how Steve Perlman and his cofounders started Web TV shows the importance of investors who would believe in the project. They were starting on something new and not all people or investors for that matter believe that what Perlman was presenting would actually make it big in the market. But it was important that these investors realize this because Perlman and his team needed the money obviously to continue the project. Budget is another issue of concern for every startup.

But another issue that Perlman and his team had to contend with is that they initially lost Sony with which they were supposed to deploy their product to. But with this issue Jeff Brody didn't back out and he kept believing in what Perlman and his team was doing that time. This spelled the great difference. As there was still another who invested in the project in the person of Paul Allen.

This part of the story shows that investors who would believe in the project really are valuable people in the success of any startup. They believed in Perlman and his team and the project gets going. But of course, these investors wouldn't have believed in them if their project had not been great from the beginning.

Alongside Perlman's vision was his personal mission to connect average people together doing non-engineering things, the things that interest them—to foster better communication, sharing of ideas, and for pure entertainment. This shows that Perlman knows his users and he was bent on making things understandable for them who are not really technical people.

This goes to show the value of knowing your target market and responding to their needs. Because Perlman and his team believes that they have to think the way these ordinary users think to really come up with something that they would find interesting to work with.

The story of Web TV also proved the value of working at the right place. Steve Perlman moved from Silicon Valley to the East Coast and even the location mattered. The location proved that it would be easier to work in an

environment where the resources—human and technical are.

However, of all the notable features of this startup, the most valuable I think is the attitude of the three cofounders. They knew what they were doing and they shared the same vision and the attitude reached and influenced the rest of the organization.

Pelrman was right when he said that they could have had all the technical talent and engineering know-how and the business knowledge but if they were acting like Chinese fighting fish in a tank together, the whole company would have failed. I learned that at the end of the day even for big startups attitude truly matters.

## CASE STUDY# 7

Topic: Paul Buccheit, Creator, Gmail

“Don’t be Evil.” This is Google’s company motto and this was suggested by Paul Buccheit in a 2000 meeting on company values. This somehow sums up how Buccheit views work and his craft. He may not be a founder as he was considered to be the 23<sup>rd</sup> employee of Google but clearly he contributed more to Google than many founders do their startups. This only proves that there is no person big or small in a company who can contribute to its success.

Reading Paul Buccheit’s story reinforced what I have always observed or realized for every startup story that I read in this course. That is everything starts from a “vision.” Livingston asked Paul Buccheit of his vision when he built the first version. As Livingston put it: “Was your vision to create a better email program or was it to build something that would allow you to search through your email?” and to which Paul Buccheit answered “both.” He understood that both key points are important and in his vision of what to create he incorporated both of these key points to come up with a version of a program that would answer both which are deemed to be important to the users. But everything boils down to the fact that something great always starts with a vision. And I think this holds true for every startup story I read for this course.

Though it is quite obvious that every startup meets a lot of challenges, this one particular story of Paul Buccheit has its very inspiring side on meeting the challenges that greeted them on their way to really coming up with something big. Buccheit acknowledged the fact that there’s a lot that was challenging about it just because the project was very big.

The idea of giving everyone a gigabyte of storage to start with was something a lot of people actually didn’t think was real. They thought it was a joke. It was like for me that the people who heard of this weren’t taking it seriously. This is probably because they don’t think it can be done. The people then thought it was impossible because at the time the standard was around 2 or 4 megabytes and here they are giving everyone a gigabyte storage. But Paul Buccheit and his team proved them wrong.

I also learned from Paul Buccheit's story that you really meet a lot of challenges when you are doing a lot of things that are new. Just like that time when they were doing a lot of things that were new to Google. They didn't get confined to their initial vision of doing a web search. They went far and beyond realizing the needs of the users.

The important thing I learned from this side of the story is that you don't confine yourself with the vision you initially have your minds on. We go beyond to answer the perceived needs. And in this case it was the need to receive and store a lot of data or emails which is a different systems problem from web search.

Another thing I learned in the startup story of Gmail is that to be able to really make something good it has to have something that will make the product stand out. In this case it is the product's autocomplete feature that also serves to be the favorite of Paul Buccheit himself. This was a first of its kind feature and none of the other web mail providers had autocomplete. This feature autocompletes the email address when the users type it. It is then important that we think of something that will be a first of its kind so that we can really stand out in the market filled with so much competition.

Another brand new feature that Buccheit worked on was the conversation view. It is when you click on a conversation and you get all of the messages as cards instead of separate emails. This also made the Gmail idea really great and stand out from the point of view of the target users.

In the startup story of Gmail, I learned that anybody who wishes to come up with a good product that will be patronized by the target users, one has to take the user's perspective. This was precisely what Paul Buccheit did. He took on the user's perspective when he designed Gmail. They listened to the users. Everytime a user would point out a problem he or she encountered, Paul and his team look at the underlying problems and came up with solutions to make the program better for the users.

One notable thing I realized in the story of Gmail is that they never denied the fact that they need other people to complete the job. Paul and his team didn't take it all to themselves to finish the project. They know they need to bring in more people because Buccheit believed that there is so much more they can do. He knew then that there are a lot of works to do as the product becomes big and he needed to support the millions of users.

Just like any other startup story, this project met its darkest days and Buccheit acknowledged that there were really days when the project was really

controversial because people back then weren't really sure if they should be doing those things that they were doing then. There were times when the problems would swing against them and they felt it was very hard to deal with. But with the spirit of Paul Buccheit they then got used to this and went on to do their jobs.

Buccheit's idea that the people are the biggest resource when asked of the other valuable things in starting up the Gmail project goes to show that the projects big or small will definitely hold its ground if the people behind it are one with the goal of coming up with a project that really is big and grand.

It is also worthy to note that a major consideration in the startup of the Gmail is that it is starting up within the folds of a big company and that the brains behind the project have access to the company's resources. This only makes me realize that a wide range of resource is needed to make something successful.

## **CASE STUDY#8**

### **Topic: Mike Ramsay, Cofounder, TiVo**

Mike Ramsay as he cofounded TiVo with Jim Barton generally proved to everyone that addressing the needs and interests of the target market is very important. Initially, they planned to create a network server for homes. They realized however that it would be hard for them to explain to consumers why they needed one. Upon this realization of this, they simplified the idea down to one component of the original plan. It was the digital video recorder or the DVR.

This shows that the two know their target market much and they know how exactly things would work for them. Knowing the target user and their needs plus their knowledge of something will somehow open the way for greater things to come. The two, Ramsay and Barton didn't shoot for the stars; instead, they became more realistic.

Reading the startup story of the TiVo made me realize that revolutionizing something is really important in any business set up or scene. During that time when people had talked about storing video data on a disk before, it was really expensive. They revolutionized the idea and they had come up with the product that would be more interesting to the consumers.

They came up with TiVo phone home. It's like controlling satellites that are orbiting Mars. They raised the first round of money and they started getting users. This was the start for them and eventually they had to raise more money in 97 and went on to continue with the project.

This idea shows that a project wouldn't be successful unless a group of people are willing to try out this new project and that there would be enough funds to support the project. All these will make the continuation of the project possible.

Another thing that also made me realize that for every product launched in the market, the consumers or users should find something new or exciting for them to continue patronizing the said product.

In this case, it was the feature that allows the users to pause something that is going on live. That was the hook. This feature intrigued the users and the other potential users of the product and that was the turning point for the TiVo.



This only goes to show that if one envisions to start something new, that something new should really be able to have something that would trigger the interest of the target consumers. This would probably start with a strong sense of vision of what one wants to happen and what one knows about the target market and their needs.

Another thing worthy of taking note is the idea that founders of the TiVo didn't rest on their success. They celebrated but they continued working. When they realized that consumer electronic companies would come in and they got worried about it, they thought of the problem and found a solution. What they did was to license their technology to Sony and got good license deals in the process.

I realized that there would be threats, major and minor for startups but what is important is that one would find solution to counter these threats and make things work for the advantage of the company he or she has started.

The last part of the startup story TiVo or of Mike Ramsay in particular is that he gave the advice of not taking anything with you when you come from a big company ready to startup on something you can call your own. This avoids the idea of being sued even just for fun if you take with you ideas, physical things, or time.

To Ramsay, it is important to start using your own ideas. Be very careful about the intellectual property. Ramsay values the importance of acknowledging the originality of ideas and wouldn't want to mess up with any company big or small.

This goes to show that if we are given the chance to work for a big company and would want to do a startup of your own business, one must forget what had transpired in the company you were connected with. Never use the physical resources of the company for the benefit of your own startup. Start with what is really yours—ideas, physical things and time.

Doing so would mean that you are responsible for everything that your are planning to do and would not get messed up with the company you previously worked for in the event that your own company makes it big in the industry.

One other thing I learned from the story of Ramsay is that when you work with a group of people, it is important that you all maintain one common vision and that you all would be doing your own share of the job and at the end of the day divide what you have equally to acknowledge the efforts and hard work of each. Nobody should think he is better than anyone else in the team. Just like

the story of Ramsay and his colleagues. Though he and Jonathan came up with the idea and the two others came in to follow, the founding shares were divided equally. It was split in four ways.

## **CASE STUDY#9**

### **Topic: Evan Williams: Cofounder; Pyra Labs (Blogger.com)**

If there's something I can say about Evan Williams, it will definitely be "he has a big fighting heart." Looking at the story of Blogger.com, it takes one with the courage to go against the odds to bring the company back to life. Others would have surrendered, but he did not. From this part alone, I learned that no amount of failure should bring us down because if we know that we have something good at hand, we just need to work really hard and wait for the time to shine. Like what happened to Blogger.com.

Most of the start up stories I have read so far have involved people who declared to the whole world that they are self-taught. And Evan Williams was no exception. He said that he is self-taught and that he went to college but dropped out because he claimed he did not need a degree. Though I do not quite agree with him on the issue of getting a degree, I agree however to the idea that if one is willing, he would learn a lot of things even if we are not in school. But it would take a great deal of perseverance, discipline and diligence to really exert effort in learning something that would bring you success in your chosen endeavor. His passion to learn is not that type that springs from the books but one that is really unconventional. I learned from this part of the story that if one is willing and able, one would be capable of learning.

Another thing that I was able to note in Evan Williams' story is that he, like the other guys, also started with a vision. He envisioned raising money and building something cool and he did just that with Blogger.com. This further reinforces the idea that once we set our minds on something, we would be able to achieve it.

Williams had a flexible mind. He did not get himself stuck with the original plan for Pyra. The idea then was for Pyra to be used as the personal and project information management system. But when Williams developed Blogger.com to manage his personal weblog and it quickly became an important mechanism for sharing and then they capitalized on the growing popularity. They did not stagnate on the original idea. They ventured into something else and in this case the Blogger .com.

Evan Williams' story further reinforces the idea or the importance of having

someone to believe in your plans. In his case, it was his friend, Meg Hourihan who got excited and decided to do a start up with him. These people who believe in start ups provide the main man of the game the necessary boost to continue what he has planned.

Williams' principle of point of no return teaches me to hold on to my dreams and not to turn my back even in the event that we encounter difficulties. Williams did not entertain the thought or idea of losing and defeat thence he said it was the point of no return. He and his friend definitely know what they want to happen and they stayed focus on what they want to achieve. This partly is William's vision.

The setbacks Evan Williams' encountered even during the early stages of the project didn't stop him from doing what he thinks is right. The project initially didn't bring in money but this did not dishearten the founder. He knew what he wanted and he was determined to make things happen. He knew he was changing the world and the problems he met never stopped him from doing what he thinks he needs to do.

The story of Evan Williams once again proved my previous understanding that indeed there is a social component to co founding a startup with a friend. I also learned that working with other companies may also benefit the person who is starting upon something. The collaboration would somehow ease out existing problems. The linkage between Blogger.com and Pay pal in terms of payment of customers proved to be beneficial for Williams and his partner.

Things seemed to be falling into place for Evan Williams as he also made use of his blog for announcing things he needed like when he needed to rent a space for him to work and there was this company, Bigstep, which offered him free desk.

Williams didn't stop working and launched Blogger Pro which is the paid version of Blogger. This probably opened the opportunity for them until that time when Google came knocking in.

There were times when Evan Williams wanted to quit but he did not. And his efforts paid off. He and his Blogger.com became a huge success. From his story, I learned that there is still truth to the old adage that says "quitters never win and winners never quit."

## **CASE STUDY#10**

### **Topic: Ray Ozzie: Founder; Iris Associates, Groove Networks**

Ray Ozzie's story is just like any other start up stories I have read so far. He also started with a vision or a desire to do something that will answer a perceived need. His ideas were not based on technology but on a need he saw for users or potential clients for the products. This shows that Ozzie has a vision and that he is responsive to the needs of the customers. He feels the pulse of the target market for he knows what they need. Given this, I learned that it is very important for anybody engaged in business to know what the target client needs for this will ensure success of the venture. But this isn't easy I guess because for one to truly know what the target customers need, he has to be well informed and knowledgeable of the field he is in. This is obvious in Ozzie. He knows his craft and he knows it well.

Ozzie was working on with something and in this case the Lotus Notes but since he knows the target market's needs, he knows he can do a better product or software that would basically be an answer to what was then perceived as a need. He was so sensitive with what was going on that he realized that the nature of work is changing. Technology at that point have been started to be used to help people work together within corporate boundaries and from this Ozzie thought of developing collaboration software of his own. This ensures a captured market because the software would answer the needs of the target market. It is then important that one knows the environment and the nature of work of the clientele in order for one to develop a possible solution to such problems.

Ozzie's startup story also tells me the importance of working with people whom you can trust. He started with his brother and two associates and these people have been part of the support system that enabled him to pursue his plans. There also other people who became instrumental in his vision of developing a collaboration software of his own. He didn't have funding and then Mitch Kapor and Jonathan Sachs decided to invest in his ideas. It is indeed important that there are people who believe in your ideas and who believe in your ability to make things happen. The money they put in helped Ozzie continue with his plans.

Just like any other start up stories, Ozzie encountered and hurdled a lot of problems. But one thing I have noted in Ozzie is that he engaged himself in

careful planning. He wrote a couple of founding documents—a scenario-based document and a bottom-up document. These documents helped him concretize the vision he has set for himself and for the company he is building. The scenario-based documents allowed him to describe the high-level challenge that he is trying to address and the end-user scenarios the he was trying to solve. This makes things clear for everybody involved and for those who would be involve in the future. This is a way to get everyone in synch with what direction the company would be going this the vision of the company is made clear to all.

The bottom-up document on the other hand describes the different technologies that will have to be assembled to accomplish that vision. This further proves that Ozzie had everything laid out for the smooth flow of the company.

I have learned from Ozzie's story that careful planning plays a major function in the start up of any venture. But careful planning enabled them to work things out together and prepare for any eventualities.

It is also noteworthy to say that Ozzie's perceptions of challenges have made him successful in his field. He went through difficult times in his start up but he looked at these challenges as challenges he would take on for 10 years, not filling a quick market niche. He understands that with technology, there really is no such thing as a sustainable advantage but he knows that one can get a good running start if one concentrates on doing something hard really well. This is one thing I learned form Ozzie. Put my heart on what I am doing and give all I can give. There will be problems and there are things that will go wrong but as Ozzie said it we should just have to do it really well.

Ozzie also thinks that with a start up, everybody is on the mission together. He knows the importance of making everyone feel that they are important members of the organization and that he/she can do something to help the organization succeed. Furthermore, he mentioned that it is important that they hire people who believe in something that they are trying to accomplish. I completely agree with this because how can an organization succeed if the people in it do not believe in what the company envisions to achieve. We need supportive people behind us to back us up and to keep us going especially during the times when the start up of a business venture would meet many problems. There will definitely be a lot that would go wrong but if you are surrounded by people with the same vision and driven by the same desire to realize the vision, the leader of the start up would definitely be encouraged to continue with his plans.

## **CASE STUDY#11**

### **Topic: Mitchell Kapor, Cofounder, Lotus Development**

Mitch Kapor founded Lotus Development with Jonathan Sachs in 1982 and his start up story is nothing but inspiring because of the several things that he tried to hurdle in the course of his attempt to develop a product that would spell a big difference in the industry he was in.

One notable character of Mitch Kapor is that he was passionate with what he was doing and that he is driven particularly by a fierce desire to do a great product. It was one that would respond to the needs of the users of the period. He knew this right from the start hence he set his heart out to do just as he wished he would. Lotus 1-2-3 was then born after so many trials that Kapor had to surpass.

Another thing worthy to take note of is the fact that the desire to do a great product is actually an off shoot of his personal desire of financial independence. This desire for financial independence triggered the internal motivation to develop the product that is meant not just to raise the money but more because the product would be very helpful for his intended users.

Though Kapor strived hard for financial independence, it is interesting to note that his concern for the end-users remains to be paramount. He wanted to develop a product that would make people to be more productive and he cared a lot about that.

The strong sense to be of help to others is made particularly obvious when he started his own company. He created a workplace that treated people well. This was brought by the fact that in his previous company, he was not really treated well and the people there thought he had attitude problem. Having experienced this in work, he wanted to make the company a place where he himself would want to work at and different from all those other places he knew. His idea of investing on human resources led him to create a corporate values statement that is not merely written on a piece of paper. He believed in the worth of each member of the company hence the employees are involved in the planning for the projects of the company.

But things somehow at one point didn't work both for the development of the product and in the formation of the company. But Kapor, with his strong desire to succeed kept going. He never let the set backs he experience in the

course of the software development and in the putting up of the company get in the way of his success.

Having said all these, I realized as I read his start up story that just like those who pioneered several software programs and companies, Kapor also went through the ups and downs but there are notable things I learned from his story.

First of which is the importance of having visions. He envisioned a product that would be very helpful for the users and something that would match or surpass what a product in existence can offer. Lotus 1-2-3 started with his personal vision to do a great product and he did. Another evidence of his vision is the fact that the company which he established really was a reflection of his desire to create a workplace that would encourage personal commitment from each member of the company.

From this vision of creating a workplace that would put much weight on its human resources believing that each member is a worthy entity, I learned that it is important also to pay attention to the people who work closely with the software developers. This heightens the idea that a company is made up of people who would make things happen for the organization and people who would really help achieve the set goals and objectives of the company. But in this sense also, I would like to note one other thing I learned from Kapor. No matter how much you trust and believe in others, you still have to be very careful in choosing the predecessors. Kapor was probably too trusting and giving that he didn't realize that he has chosen the wrong person to take over.

Perseverance is also another thing I learned from Kapor. There were many setbacks along the way as he developed the software which he thought would take him just very few days but it didn't turn that way. But nonetheless he persevered and continued working in the product he envisioned to produce. And the rest as they say is history.

The presence of mentors in his life also mattered and I learned that this would also help anybody in the start up stage. He knows the importance of having people or elders to learn from and I think that this realization is truly important because no matter how brilliant one may be, he still needs the wisdom of the elders especially in doing business.



## **CASE STUDY#12**

### **Topic: Paul Graham; Cofounder, Viaweb**

Looking at the story of Viaweb and how it was started by Paul Graham and company made me realize one key thing—that is flexibility. Initially, they wanted a startup called Artix. They were going to put art galleries online. But the art galleries didn't want to be online no matter how hard they tried to convince the people concerned.

So instead of pushing their luck on something that seemed not to understand their point and their ideas, they shifted to the idea of starting up Viaweb. They were flexible enough to try to fit the concept of putting the art galleries online with the idea of generating sites for online stores.

Another key thing that I learned that initially goes with the shift in ideas of Paul Graham and company is that it pays to know what the market wants. They realized that those days everyone seemed to go for online stores; hence they acted on this interest and came up with Viaweb.

Coming up with breakthroughs in the world computer systems is not an easy task but Paul Graham was able to come up with one. He and his partner didn't know how to write Windows software but knowing that something works for a group of people like those who made use of the X windows made them try to discover more than they were able to do software without having to learn how to write one on Windows. The idea of putting or generating websites for online stores was a major breakthrough.

First impressions aren't always lasting. At least for the case of Paul and on what he perceived Trevor to be. Initially, Paul thought Trevor was such a goofball. But he was wrong. Trevor was a prodigy. This only goes to show that we should never rely on how we initially see people. We should try to find out what he can do which may well satisfy the expectations of people.

Trevor didn't turn out to be a goofball after all because he delivered beyond what Paul Graham expected. Instead of writing just the image-manipulating software for them, he developed the entire thing that Paul Graham had in mind during the startup.

Paul Graham also manifested his trust and confidence in people on this startup of Viaweb. Robert was reluctant to start the project but Paul Graham still chose to do the startup with him. He said that it is because Robert is his best friend and he knows and believes that Robert is one of the best programmers in town. Paul Graham simply knew he would deliver and he did.

One thing unique with this startup is the idea that Paul Graham and company were afraid of the idea of “customers”. When they initially demoed the software to potential clients, others would normally think of signing up this people so that they can get returns of the money they put in the project.

But they didn't do that. The first thing that came to their minds is to write a few more codes that will take them farther away from their competitors. The idea of beefing up their project struck me the most because it puts the competitors at a safer distance. They became far better than other competitors are.

Thought they were initially afraid of “customers” the idea that they have to have customers for this startup to be successful remained in their minds. The way Paul Graham and company treated their first set of investors only brings to light the importance of pleasing the clients so that they will patronize our products or services. They did everything they could to keep their first customers satisfied like they give softwares for free and do whatever they wanted them to do.

Money has always been important in startups and this case or story is no exception. They knew they were running out of money by fall so they looked for possible investors. But looking for possible investors was not easy because they have to look for people with the money that they needed and at the same time the people who would believe in what they were doing.

They were fortunate enough to have found at the last minute Fred Egan. Egan saved them and they consider that a major turning point for the Viaweb project.

Knowing that Paul Graham and company were really not the men who would take care of the business side of the project, Egan took over the task of convincing the investors and reassuring them that things will work out well for them and for the company. Egan did a great job at this.

With Egan in the company, Paul and his associates focused on the writing of the softwares needed to make their project truly successful.

## **CASE STUDY#13**

### **Topic: Mark Fletcher; founder, ONElist, Bloglines**

Work hard. That is one of the basic things I learned from the story of Mark Fletcher as he did a start up. He started ONElist as a free Internet email list service, in 1997. This ONElist became eGroups and was sold to Yahoo. And it was after this acquisition that he realized he needed a vacation because he hadn't had one since he was in eighth grade because he juggled himself between work and school.

This only goes to show that for one to succeed in any venture or in any business one must really work hard to get things going for you. Then when you become successful, you rest for awhile then work again. This was obvious with the way Fletcher did his startup.

Just like the story of Schachter, Mark Fletcher's startup story began on answering a personal need. He started another company which is an anti-spam company called Trustic and this one wasn't going really very far. But it was also during this time that he was doing another thing on the side. That other thing became Bloglines. He did it because he knew it was something he could use for himself. Just like when he started ONElist. He started it because he wanted to start a mailing list for his parents and during that time, one has still to download software and one had to have a computer connected to the Internet. The whole thing was just too difficult for an average person to put together. And then he came up with ONElist.

His thinking was simple. Solve the problem that you have and chances are, other people may have the same problem. He did just that and ONE list indeed solved the problems of many people and as a result it was acquired by Yahoo because the company knows that ONElist doesn't just solve Fletcher's problem but also those of the others.

It is important then that with a start up, the target customers need the product or the service you are starting with so that you are assured that there will be a captured market for it, hence the idea will be a big hit.

One thing significant also with the startup is that it didn't require the very big money for funding. He just needed something less than the other startups needed. There is one thing he realized though in the process of starting up with ONElist. He invested on computers by buying them. Then later on he realized that he shouldn't have done that. He could have used just the virtual dedicated software hosting services.

Flexibility is also one of the key points I learned from this startup. He started with the idea of an antispam company but when things are really not going his way with the antispam thing and he realized that Bloglines would do better, he shifted his interest and concern on the much better one.

Knowing what the target market really wants is a critical point in a startup. Fletcher found himself lucky because at that time, blogs in general started to become really big. Even reporters were using Bloglines. People like to talk about things they use and Mark Fletcher thought he was fortunate in this regard. There was no planning on this according to him. He thought it was serendipity or fate but I think it was more because Fletcher was attuned with what the market needs hence he knew what to target for.

Fletcher further proved that knowing there are users would really help boost a startup. His philosophy on consumer-based Internet companies is that you don't need to worry about the business model initially. What is important is that you get users then everything else follows.

What makes Fletcher's startup story a bit different from other stories I read is that this is the first time I read a founder say that there's nothing much surprising as to his startup experience. He just said that it is so amazingly fun and that they are amazingly stressful. A startup according to Fletcher is all-encompassing the emotions. And his bit of advice is you have to do it while you're young and while you still don't have your own family or you will lose it all.

## **CASE STUDY#14**

### **Topic: Joshua Schachter: founder, del.icio.us**

Joshua Schachter was the one who started the collaborative bookmarking site del.icio.us. according to him, it was something he was building for himself because he needed a way of organizing his collection of 20,000 bookmarks, and he hit the idea of tagging them with brief text phrases to help him find links later. He put del.icio.us on a server and opened it up to other people, and it began to spread by word of mouth.

With this brief introduction of how del.icio.us started, there are two things I realized. First is that with a creative and innovative mind, one can discover a treasure which might give one a very good fortune. Joshua Schachter started this product for himself but landed on preparing this for something bigger only because what he actually needed is being sought for by other people.

Hence it is important to know that for a startup to succeed, what you have or the product or service you wish to start with is needed by the people. Just like what happened to del.icio.us. once it was put on a server and opened to other people, it spread by word of mouth like the spread of a wild fire.

This proves that once there is a need for your product or service, the target users themselves would help you or anyone who starts this project up the good exposure a new product or service needs which no other marketing strategy could equal.

However, of all the startups I read for this course, there is one significant thing that struck me as I read the story of del.icio.us. To others who are starting up, money or the lack of money was a problem but based on what Joshua Schachter shared about other people who tried to startup on the idea of bookmarking, I realized that having so many capital may also be a way to failure of a startup.

Another thing significant in this story is the idea that according to Joshua Schachter, this startup somehow made it good at the onset because he didn't have business in mind yet at the time he was doing the bookmarking. He was

not outright doing a venture. He was merely developing a product which he knew at that time would answer his personal needs but later found out was also answering the needs of the prospective clients.

There were a number of things Joshua Schachter was also worried about. He needed capital but he knows he didn't need too much money because it is difficult to defend such high valuation. But as it is a good product that he was developing there were quite a number of people who were interested and became his VCs or the venture capital.

There were other things he got worried about on the technical side of the project. Scaling and tagging were basically two of the technical problems or issues he and the other men he hired had to deal with. But just as Joshua Schachter was a persevering man, he never let these problems get in the way of his attempt to do well in this startup.

Schachter seemed to me a man of profound intellect and in one of the parts of the interview, when he said that he never had a great deal of trust for people who don't execute on core ideas, I realized that it isn't enough that you have an idea and that you have money to work with. One should have the courage and the will to start up on something he himself thought about. Once you have an idea, according to Chachter, you must do or execute this idea. We don't need to wait for others to execute the idea for us.

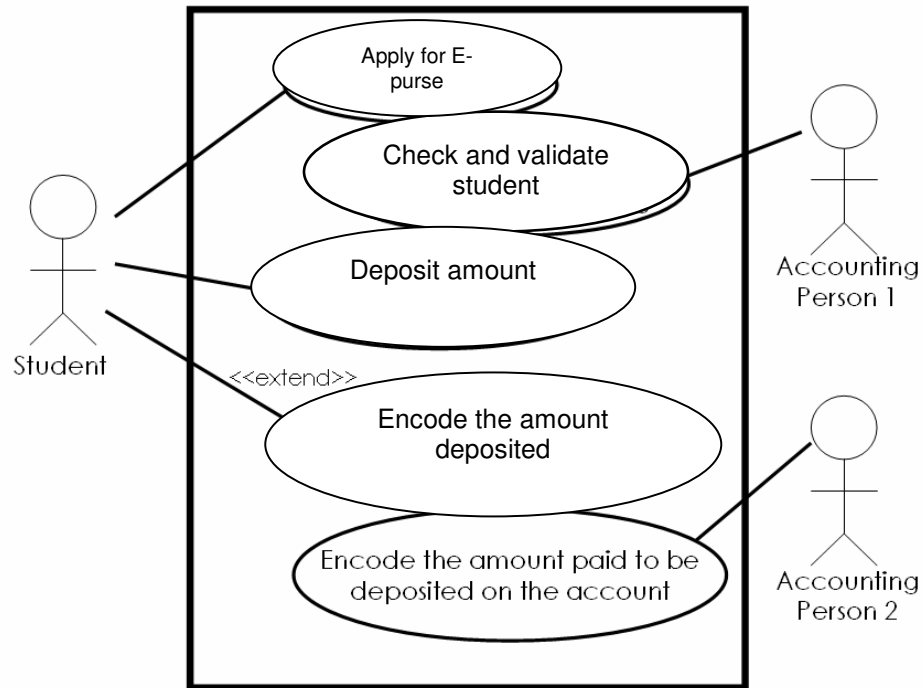
Having his own startup made Schachter realized that it pushes him far. He knows he has a lot to learn and he embraced the idea. He felt the freedom to run things as he pleases and the weight of responsibility in which he knew that time he had to do certain things at a certain time. And this idea somehow balanced the freedom he felt.

The last piece of advice he gave was something worth pondering about. He told Livingston when he was asked of his favorite advice to a technical person who wanted to start a startup. He said "reduce." Do as little as possible to get what he have to get done. Do less of it; get it done.

His advice is truly worth pondeing on. Anybody who wishes to start a startup should not embrace something really big initially. Do it bit by bit, piece by piece and then make it big.

# USE CASE

## APPLYING FOR AN E-PURSE ACCOUNT



### Identification Summary

Title: Applying for an E-Purse Account

Summary: process of applying for an E-purse

Actors: Student, Accounting Person 1, Accounting Person 2

Creation Date: June 18, 2008

Date of Update: June 18, 2008

Version: 1.1

Person in Charge: Jericho Dela rosa

### Flow of Events

Pre- Conditions:

1. The student must be enrolled.
2. The student must have .
3. The student must have 50 pesos.

Main Success Scenario:

1. The student pays the amount he/she wants to deposit
2. Accounting validates the account of the student.
3. Student enters his/her pin on his/ her account.

Alternative Sequences:

1. The computer informs the student that the PIN he/she provided needs to have at least 6 numeric entries.
2. Accounting type the wrong ID number

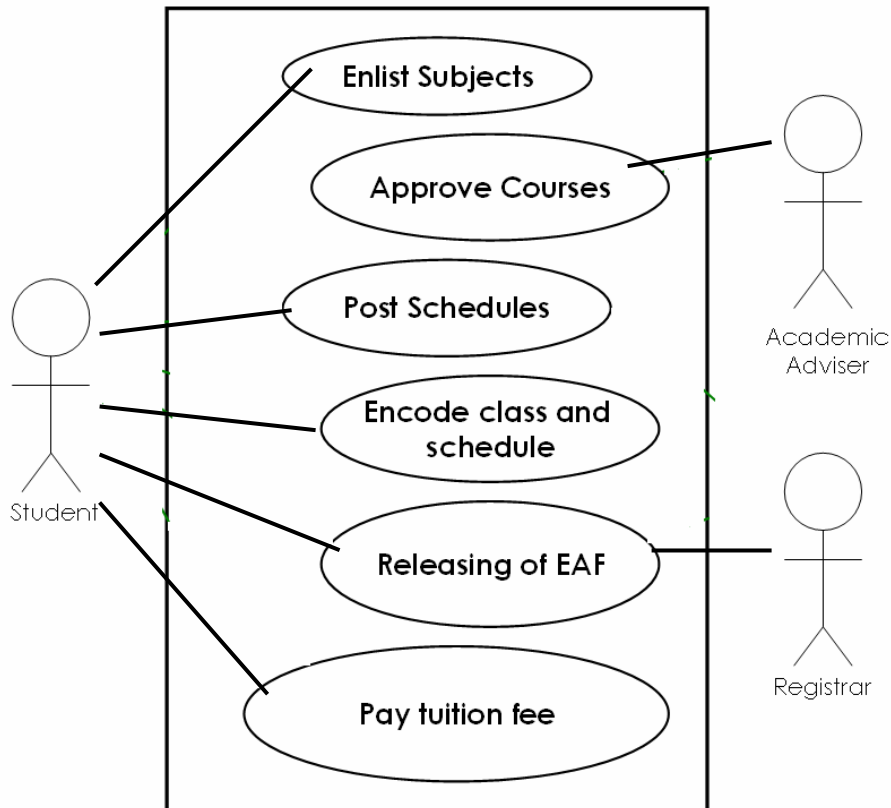
Error Sequence:

- E1. The student does not have 50 pesos. Use-case fails.
- E2. The student is not enrolled. Use-case fails.

Post Conditions:

1. The student can pay his/her balance in the LRC.
2. The student can pay for the foods he/she ordered in the AKIC Cafeteria.





### Identification Summary

Title: Enrollment in DLS-CSB

Summary: Use gives the process on how the students in DLS-CSB enroll.

Actors: Student, Registrar, Academic Adviser

Creation Date: June 5, 2008

Date of Update: June 6, 2008

Version: 1.1

Person in Charge: Jericho Dela Rosa

### Flow of Events

Pre- Conditions:

1. The student must be enrolled in DLS-CSB.
2. Students should clear all his accounts/balance.
3. The student's Infonet account must be activated.

Main Success Scenario:

1. The student pays at the accounting office.
2. The student enlists subjects and encodes his/her schedule.
3. The student gets his/her EAF.

Alternative Sequences:

1. Invalid username and password in the infonet.
2. Student comes on lunch break.

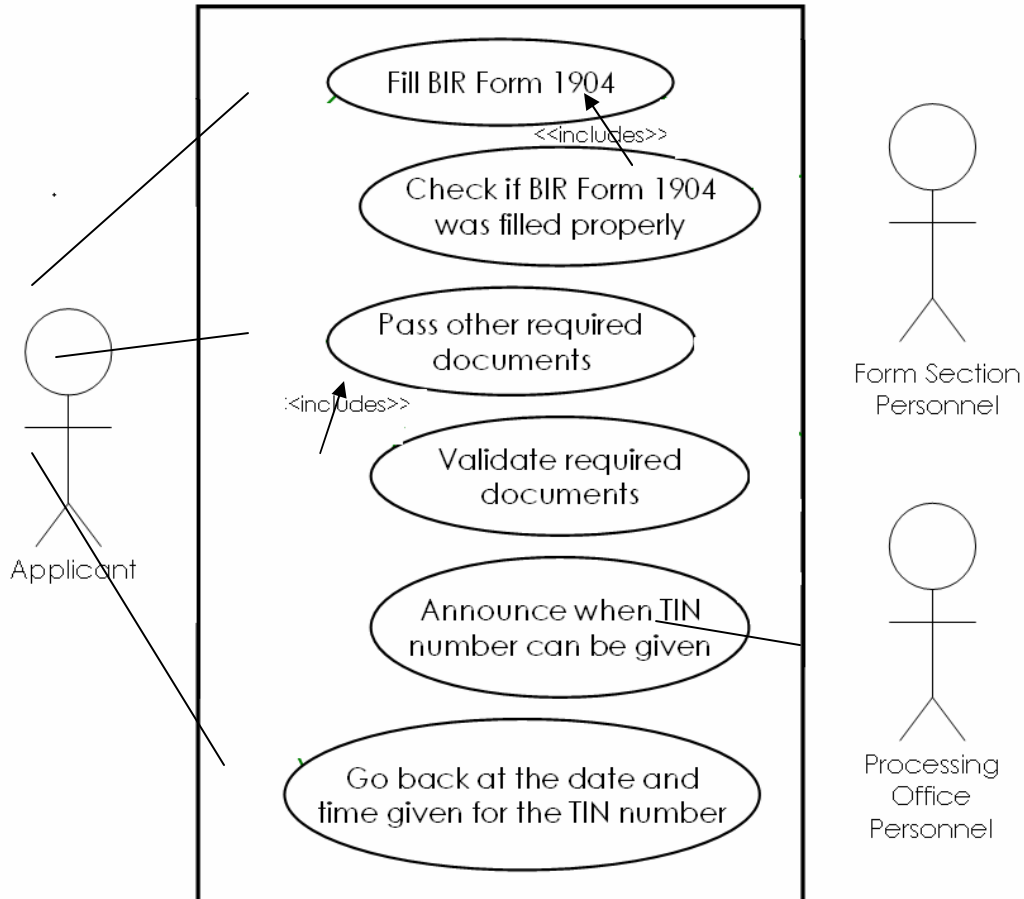
Error Sequence:

- E1. The student has not cleared all his/her accounts. Use-case fails.
- E2. DLS-CSB is closed already. Use-case fails.

Post Conditions:

1. The student can study in DLS-CSB.
2. The student can use the facilities in DLS-CSB

# TIN number



## Identification Summary

Title: Getting a TIN Number

Summary: Use case gives the process on how to get a TIN number.

Actors: Applicant, Form Section Personnel, Processing Office Personnel

Creation Date: July 10, 2008

Date of Update: July 10, 2008

Version: 1.1

Person in Charge: Jericho Dela Rosa

## Flow of Events

Pre- Conditions:

1. The applicant must have complete requirements (certificate, barangay clearance and passport.)
2. The applicant must not have a previous TIN number.
3. The applicant must come on any given weekday.

Main Success Scenario:

1. Submits the complete requirements.
2. Documents are proven to be valid.

3. TIN will be announced, when it will be released.

Alternative Sequences:

1. The applicant comes during the personnel's' lunch break
3. The applicant comes back when the lunch break is over.
2. The applicant runs out of application forms
4. Can print the form through the internet.

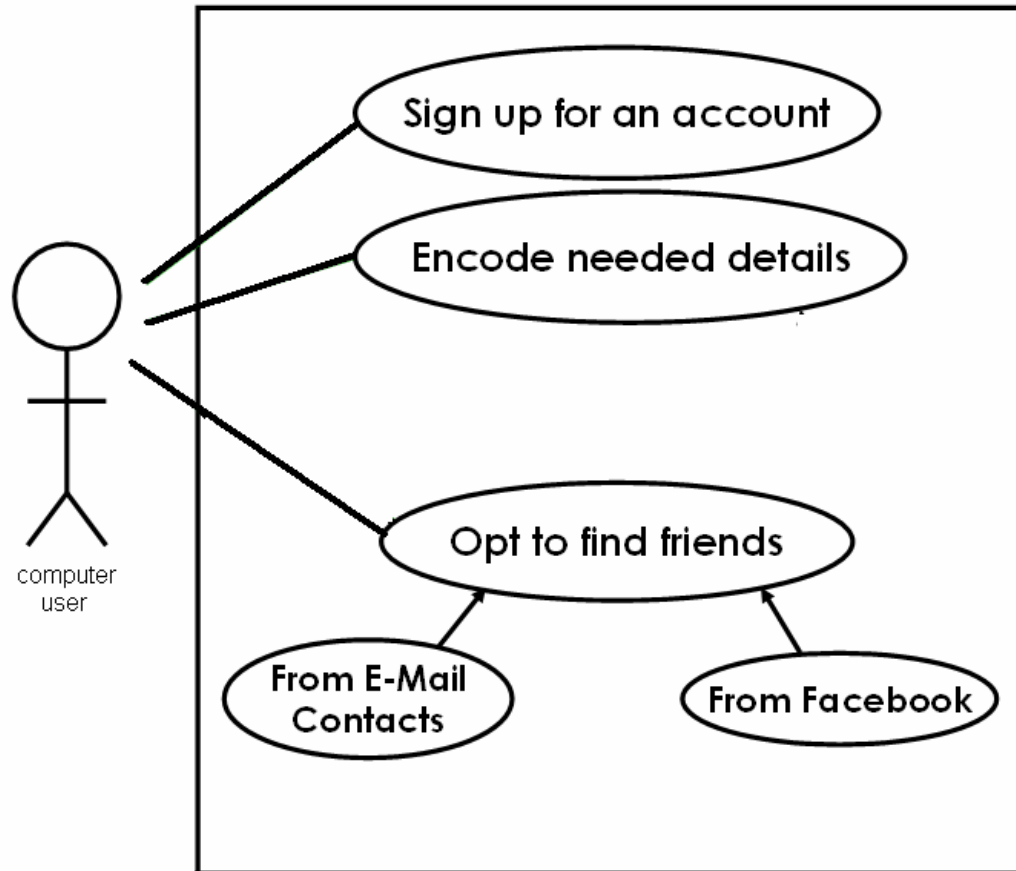
Error Sequence:

- E1. Applicant comes on a holiday. Use-case fails.
- E2. Applicant passed incomplete requirements. Use-case fails.

Post Conditions:

1. The applicant can transact with government office.
2. Applicant can use TIN for proper identification for tax purposes.

# FRIENDFEED



## Identification Summary

Title: creating an account on friendfeed.com

Summary: use case gives the process on how to create an account on friendfeed.com

Actors: computer user

Creation Date: August 6, 2008

Date of Update: August 6, 2008

Version: 1.1

Person in Charge: Jericho Dela Rosa

## Flow of Events

Pre- Conditions:

1. User must have a computer
2. User must have an internet connection.
3. User must have valid and existing e-mail address.

Main Success Scenario:

1. User signs up for an account.
2. User encodes and fills up the details needed.
3. User opts to find from e-mail address, friendster etc.

Alternative Sequences:

1. The user enters existing username.
  - > User types another username.
2. The PC User types the wrong e-mail address
  - > User types the correct e-mail address.

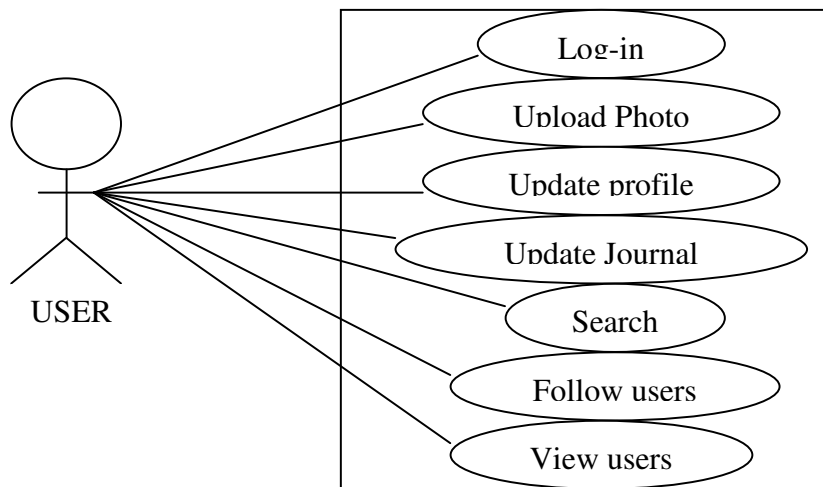
Error Sequence:

- E1. Internet lost its connection. Use case fails.
- E2. Brown out in the area, where the user is signing up. Use case fails.

Post Conditions:

5. The PC User can invite more of his/her friends to join his network.
6. The PC User updates friends on their selected network.

# TWITTER.COM



Title: How to post on twitter.com

Summary: This use case shows how a user can post updates on twitter.com

Actors: User

Creation date: August 5, 2008

Version: 1

Flow of events

Precondition:

- user must have an existing account on twitter
- user must have internet connection.

Main success scenario:

7. User logs-in
8. User insert his updates on the text box
9. User clicks update
10. twitter shows the changes

Alternative Sequences:

A2: Exceed the maximum text.

3. User cannot update the journal

Scenario goes back to point two.

Error Sequences:

E1: User cannot log-in

4. user will not be able to post.

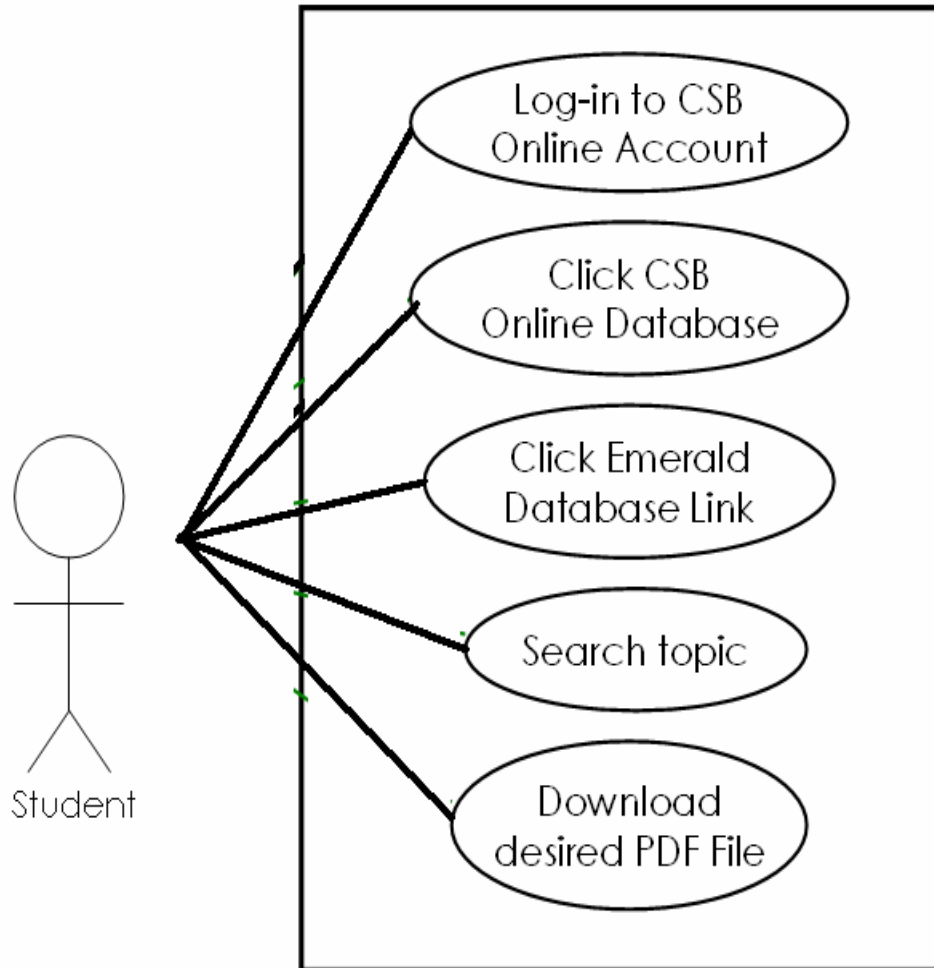
use case fail.

Post conditions:

-User has new pos

-User's followers are now updated

# DOWNLOADING A PDF FILE IN DLS-CSB'S EMERALD DATABASE



## Identification Summary

Title: Downloading a PDF File in DLS-CSB's Emerald Database

Summary: Gives the process on how a DLS-CSB student can download a PDF File in Emerald Database.

Actors: Student

Creation Date: August 12, 2008

Date of Update: August 12, 2008

Version: 1.1

Person in Charge: Jericho Dela Rosa

## Flow of Events

Pre- Conditions:

1. Must be a DLS-CSB student.
2. Must have computer
3. Must have internet connection



3. Must have infonet account.

Main Success Scenario:

1. Log in to DLS-CSB account
2. Search the topic on emerald he/she wants.
2. The student downloads the desired file.

Alternative Sequences:

1. Enters wrong username and password
  - > Enter correct username and password.
2. System of DLS-CSB is down.
  - > try again some other time.

Error Sequence:

- E1. Topic that has been searched is not valid. Use case fails
- E2. Internet connection is lost. Use case fails.

Post Conditions:

1. Can search for more PDF files.
2. Can use PDF file for searching.

# **SAD PAPER**

A Systems Analysis Study on the  
BUYERS' ACCOUNT AND PROJECT SALES MONITORING SYSTEM  
of Omico Corporation

Presented to the  
Computer Applications Program  
School of Management and Information Technology  
De La Salle – College of Saint Benilde

In Partial fulfillment of the  
Requirements of the subject  
Systems Analysis

Submitted By:

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Sysanal, OOA

August, 2008

Submitted To:

Professor Paul Amerigo Pajo Jr.

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### I. CHAPTER 1

## **COMPANY BACKGROUND**

**Company Name: OMICO CORPORATION**

**Sector:** Mining and Property Holding

**Incorporation Date:** 30 August 1968

**Extension:** --

**Corporate Life:** 50 years

**As per AOI:**

Number of Directors: 11

Ownership Restrictions: 40%

**As per By-Laws:**

Stockholders Meeting: May - last Friday

Fiscal Year: 01 January to 31 December

**Business Address:** Suite 1109, East Tower

PSE Centre, Exchange Road

Ortigas Center, Pasig City 1605

**Tel. No/s:** 637-6923 to 25

**Fax No/s:** 637-6920

**E-mail Address:** omico@i-manila.com.ph

**Auditor:** R.R. Tan and Associates, CPAs

**Transfer Agent:** Securities Transfer Services, Inc

**COMPANY LOGO**



**COMPANY HISTORY**

## **BUSINESS PROFILE**

Omico Corporation was incorporated in the Philippines and was registered with the Securities and Exchange Commission (“SEC”) on August 30, 1968. The Company listed its shares of stock in the Philippine Stock Exchange on May 2, 1969.

The Company’s main business activities are mining exploration and property development. The Company is licensed to operate, prospect, mine, and deal with all kinds of ores, metals and minerals. The Company is also engaged in the business of real estate development.

The Company’s businesses are organized and managed separately according to the nature of products provided, with each segment representing a strategic business unit that offers different products and serves different markets. The Company’s business is segregated into mining exploration and property development.

## **COMPANY MISSION/ VISION**

Omico Corporation aims to improve people’s lives by engaging in quality-committed, resource efficient, people friendly and nature sensitive development. By providing innovative enterprise software solutions and services; the company has built a strong following of loyal customers and they have partnered with many of these customers since their original system implementation and provide ongoing support for their operational and strategic business needs. Omico Corporation aims to be a living definition and world-class model of a Total Holistic Development Company.

### **OMICO CORPORATE VALUES**

- Customer Supremacy
- Personnel Fulfillment
- Stockholder Satisfaction
- Cooperation, Concern and Commitment
- Passion for Excellence

### **PRODUCTS AND SERVICES**

- Mining
- Sta. Rosa Homes Project

- Tagaytay Project

**NUMBER OF CUSTOMERS:** Approximately 1000

**NUMBER OF TRANSACTIONS:** Approximately 5 to 7 a month

### Organizational Chart



### Statement of The Problem

Omico Corporation has an ongoing housing project named Sta. Rosa Homes located in Sta. Rosa, Nueva Ecija. The concern of the company is keeping the Sta. Rosa Homes Project sales documentation and monitoring system organized to have an accurate and comprehensive record analysis of the Sta. Rosa Homes project buyers.

The problem is identified as:

- Manual encoding of buyer's information.
- Manual encoding of sales record.
- Possible understatement of billings to client thus resulting in possible lost revenue.

### **Objectives of The System**

This study aims to resolve the problem of the company by providing innovative enterprise software solutions and services. Resolving this problem will be very beneficial to the company, it would mean proper and accurate revenue recognition. Solving the problem at hand will help evaluate the correct profitability of the specific project and to provide automatic computation for issuance of buyer's quotation or computation sheet. Moreover, the objective of this study is to develop a systematized array of data to monitor the accounts of the Sta. Rosa Homes Project Buyers. The Buyers' Account and Project Sales Monitoring System is designed to help the company improve on their business by providing the critical sales and operations planning and execution functionality.

The general features of the system would be as follows:

- Encoding of buyers' detailed information
- Provide automatic computation for issuance of buyer's quotation or computation sheet
- Account master file
  - Encoding of new accounts
  - Account monitoring
  - Computation of monthly amortization
  - Monitoring of payment
- Monitoring of agent's account
  - Computation of agent's commission
- Reports generated
  - Buyer's information sheet
  - Quotation sheet
  - Billing statement
  - Client's ledger
  - Total payments received at any given period

*Tangible Benefits:*



The proposed system aims to

- Provide an automated array of data to have a fast and accurate way to check buyer's account
- Organize an array of the buyer's account info for the company to easily locate and access the files.
- Provide a clear view of the inventory status.
- Provide the technology required to support their goals and growth.

*Intangible Benefits:*

The proposed system aims to

- Provide innovative and quality services to create a positive impact to the society.
- Increase visibility, maximize resource utilization, improve operational efficiencies and acquire more profitable clients
- To ensure an effective control in handling the Buyer transactions and its documentation
- The system would store data availability of buyer's account info.
- Provide the company faster availability of buyer's account information.
- Increase work productivity of employees
- Increase accuracy in computing and monitoring the buyer's records.
- Improved work process that can in turn improve employee morale

**Significance of The Study**

One of the hurdles that companies are facing nowadays is keeping their company's system organized, not just to make the flow of work clean, but also to make sure that there wouldn't be unproductive and inept outputs from such disorganized inputted data. Organization makes any business competent and proficient, and it also makes the system work fast to be able to create prompt and effective results, innovations and quality decisions.

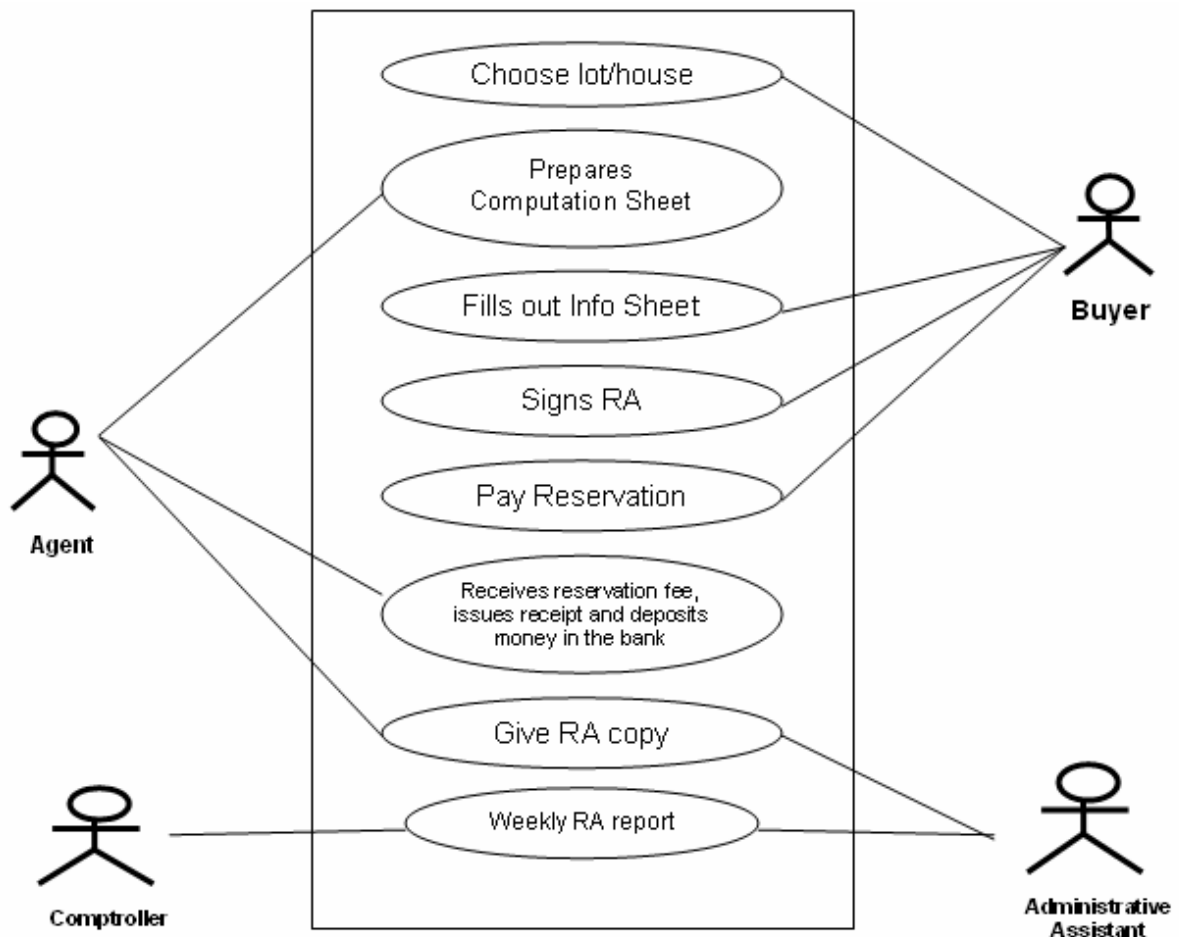
This study can help the company Omico reach greater heights by being able to make sure that their clients are more than satisfied with the improved system requirements that Omico would offer. These system requirements will give not only the company a clearer analysis of the Sta. Rosa Homes Project buyers, but will also give the clients themselves a more in-depth view of where their money goes, what's already been done, even the buyers' ledgers and more information. This will not only provide clients an easy access to their accounts, but it will also help the company filter out their system of clients and keep their files organized and updated as well.

Not to mention, this study will also stand as a proof to the company's mission – customer supremacy, which will be proven with the Buyers' Account and Project Sales Monitoring System that would definitely provide the said customers with a feeling of security and comfort, as they can see what they've been paying for; stockholder satisfaction, which will certainly be effective once they see what has already been done and where their money flows; cooperation, concern and commitment, which is will be further shown when the company aims for customer supremacy which, as mentioned, will be proven by this study, and lastly - passion for excellence, which will be supported with the new, systematic and rationalized aspiration for organization and control. The last line in Omico's vision – "We call it responsive and responsible development", will surely be shown in the proposed system because it will prove that Omico is in fact a responsible and reliable company when the direction of where and when the buyer's money goes is shown.

This study, as already stated above, will give the clients, as well as the company control of the flow of the money being given out. It will be cost-effective and will generate more accurate and detailed output as well. This study, if implemented, will also give the people a sense of comfort and self-assurance that they chose the right company, Omico, for unquestionably, the right reasons. The Buyers' Account and Project Sales Monitoring System will be, without a doubt, a huge step for Omico towards innovation and modernization. This will stress on Omico's competence to be the best they can be, their deep commitment to their patrons to finish everything not only in time but also with their pockets taken care of, and compassion towards their clients and their need to be updated and informed of every once in a while with accurate, efficient and effective data.

### **Scope and Limitation**

- Our group limited our research on the ongoing real estate development Project of Omico which is the Sta. Rosa Homes located in Brgy. Lourdes, Sta. Rosa, Nueva Ecija.



## II. Chapter 2

### Use Case Diagram of Existing System

#### Identification Summary:

**Title:** Steps of Reservation Agreements (RA)

**Summary:** This Use Case diagram shows the process of a buyer on how to buy a lot/house at

Sta. Rosa Homes.

**Actors:** Buyer, Agent, Administrative Assistant, Comptroller

**Creation Date:** August 18, 2008    **Date of Update:** --

**Version:** 1.1

**Persons in Charge:** Buyson, Carlos, Dela  
Rosa, Reyes

### **Flow of Events:**

#### **Preconditions:**

- 1.) The Omico office must be open.
- 2.) There must be an employee to serve the buyers.
- 3.) There must be availability of lot/house.
- 4.) There must be available RA forms.
- 5.) The buyer must have sufficient money to pay the amount due.

#### **Main Success Scenario:**

- 1) Buyer chooses lot/ house.
- 2) Agent prepares the computation sheet.
- 3) Buyer fills out Buyer Information Sheet (BIS)
- 4) Buyer signs RA form (2 copies)
- 5) Buyer pays P10,000 reservation fee.
- 6) Agent receives full reservation fee, issues Official Receipt and deposits money in the bank.
- 7) Agent forwards copy of RA to Administrative Assistant
- 8) Administrative assistant shall prepare a weekly report on the approved/ disapproved Reservation Agreements and also those recommended for cancellation of RA's and submits to Comptroller.

#### **Alternative Sequence:**

A1: The buyer comes to Omico Office during lunch break (temporary)

\*The buyer can wait or come back when the break is done.

A2: The buyer has incomplete requirements (temporary)

\*The buyer can come back again to bring the complete files/requirements that are needed.

#### **Error Sequence:**

E1: The buyer has incomplete/invalid requirements. (Use-case fails)

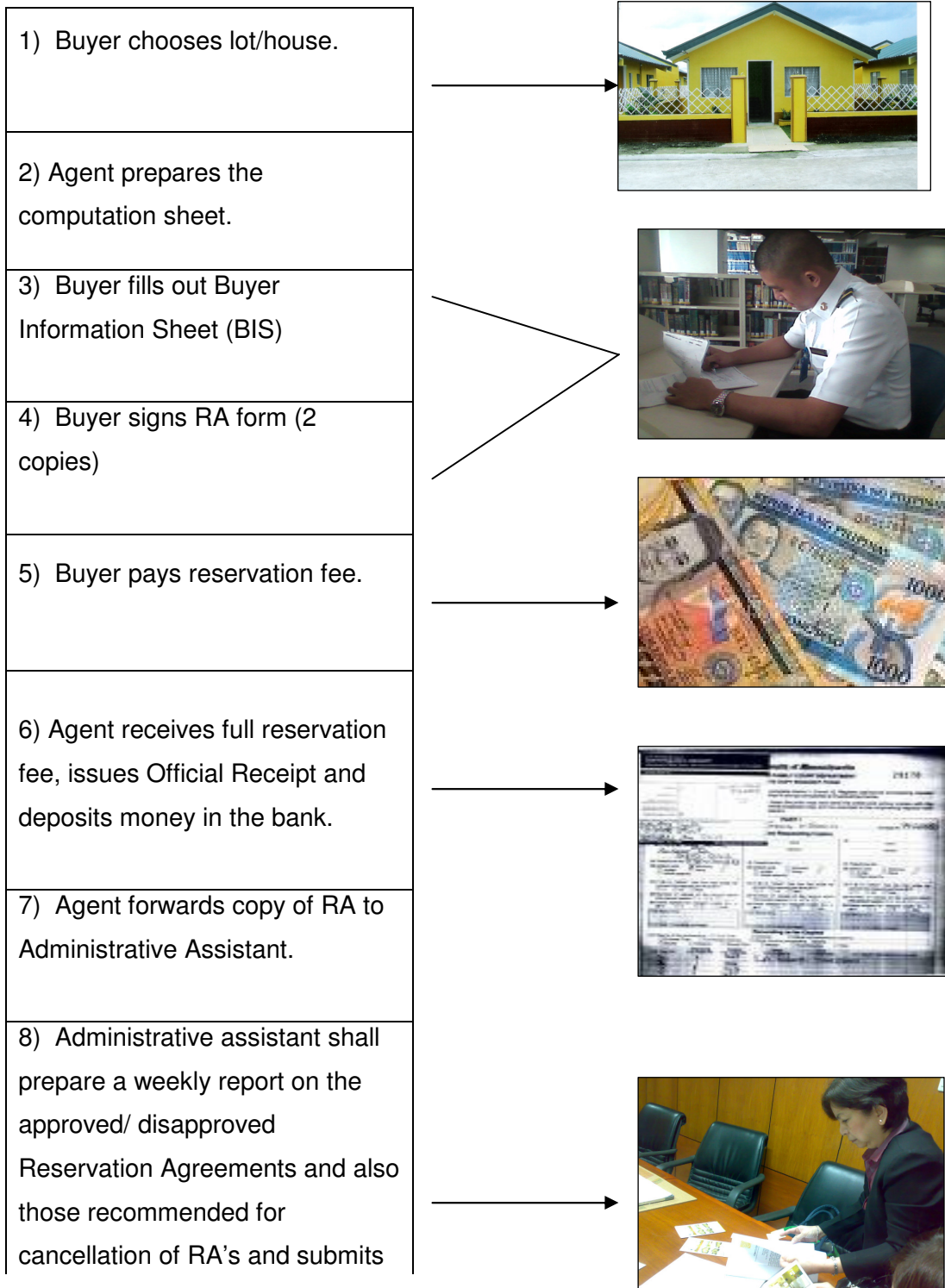
E2: The applicant doesn't have enough money. (Use-case fails)

E3: The buyer fails to comply with the deadline for full reservation. (Use-case fails.)

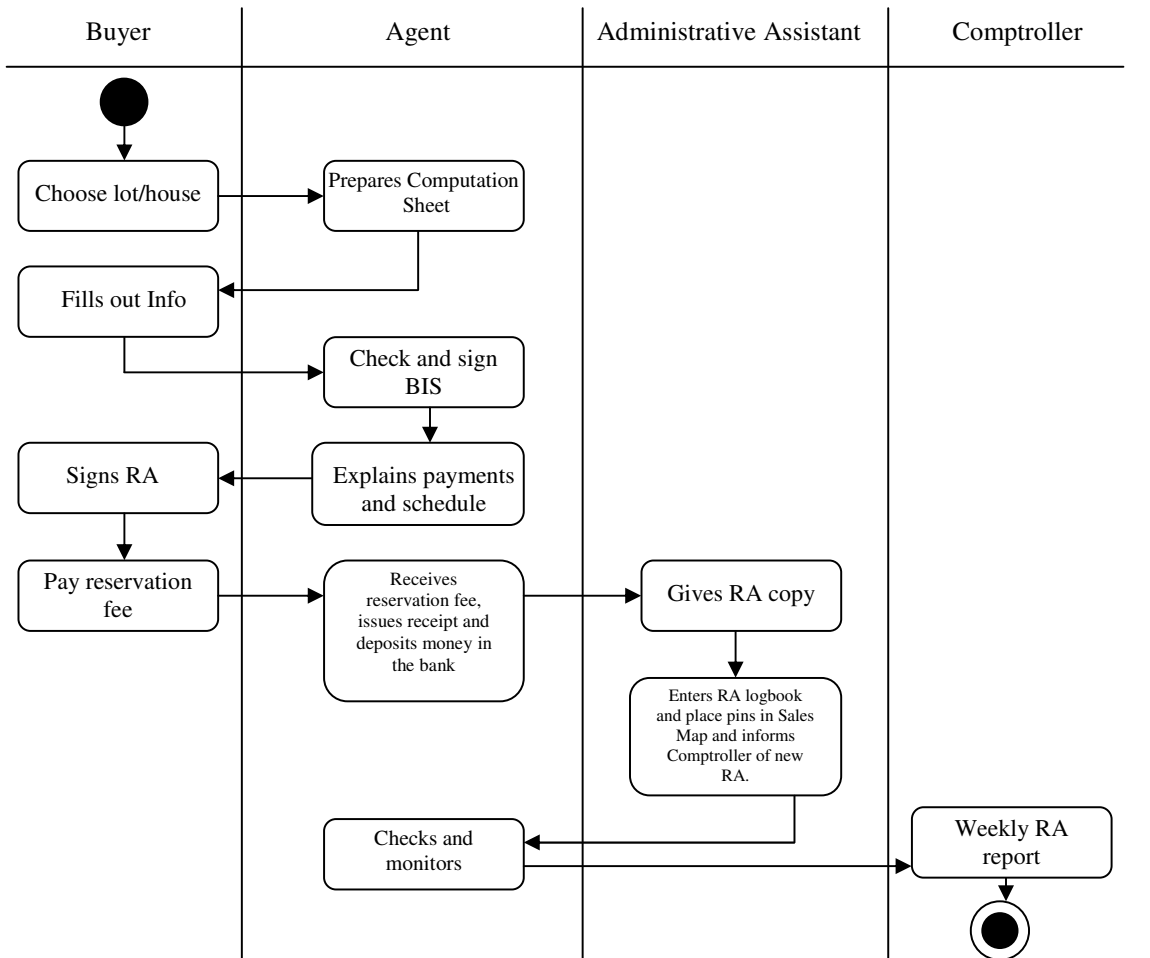
**Post Condition:**

1. The buyer has his/her own lot/house.
2. Omico Corporation will have increase in clients.
3. Sta. Rosa Homeowners will increase.

**Process Walkthrough (Use Case Diagram with pictures)**



**Activity Diagram of the Existing System**



**Identification Summary:**

Title: Steps in processing Reservation Agreements using Buyers' Account and Project Sales Monitoring System.

Summary: This activity diagram shows the process of Reservation Agreements using Buyers' Account and Project Sales Monitoring System

Actors: Buyer, Agent, Administrative Assistant, Comptroller

Creation Date: Aug. 6, 2008

Date of Update: --

Version: 1.1

Person in-charge: Buyson, Carlos, Reyes, Dela Rosa

**Flow of Events**

Pre-Condition:

1. The Omico Office must be open.
2. Buyers' Account and Project Sales Monitoring System must be connected to server
3. There must be availability of lot/house
4. There must be available RA forms
5. Buyer must have sufficient money to pay reservation fee.

**Main Success Scenario:**

- 1) Buyer chooses lot/ house.
- 2) Agent prepares the computation sheet.
- 3) Buyer fills out Buyer Information Sheet (BIS)
- 4) Agent checks and signs BIS.
- 5) Agent gives Computation Sheet to buyer and explains payment schedule and submission deadlines of buyer's documentary requirements.
- 6) Buyer signs RA form (2 copies)
- 7) Buyer pays P10, 000 reservation fee.
- 8) Agent receives full reservation fee, issues Official Receipt and deposits money in the bank.
- 9) Agent forwards copy of RA to Administrative Assistant
- 10) Administrative Assistant enters RA logbook and place pins in Sales Map and informs Comptroller of new RA.
- 11) Administrative Assistant checks computation & monitor buyer's payments.
- 12) Administrative assistant shall prepare a weekly report on the approved/ disapproved Reservation Agreements and also those recommended for cancellation of RA's and submits to Comptroller.

**Alternative Sequence:**

A1: The buyer comes to Omico Office during lunch break (temporary)

\*The buyer can wait or come back when the break is done.

A2: The buyer has incomplete requirements (temporary)

\*The buyer can come back again to bring the complete files/requirements that are needed.

**Error Sequence:**

E1: The buyer has incomplete/invalid requirements. (Use-case fails)

E2: The applicant doesn't have enough money. (Use-case fails)

E3: The buyer fails to comply with the deadline for full reservation.

E 3.1: On the 10<sup>th</sup> day from RA date: prepares Final Notice sent to buyer

E 3.2: On the 25<sup>th</sup> day from RA date: Agent prepares Notary Cancellation sent to buyer.



E 3.3: On the 30<sup>nd</sup> day from RA date: employee prepares Cancellation and Re-opening Memo sent to all concerned.

E 3.4: Administrative Assistant removes pin from their maps for cancelled reservations and re-opens unit.

E 3.5: Use case fails.

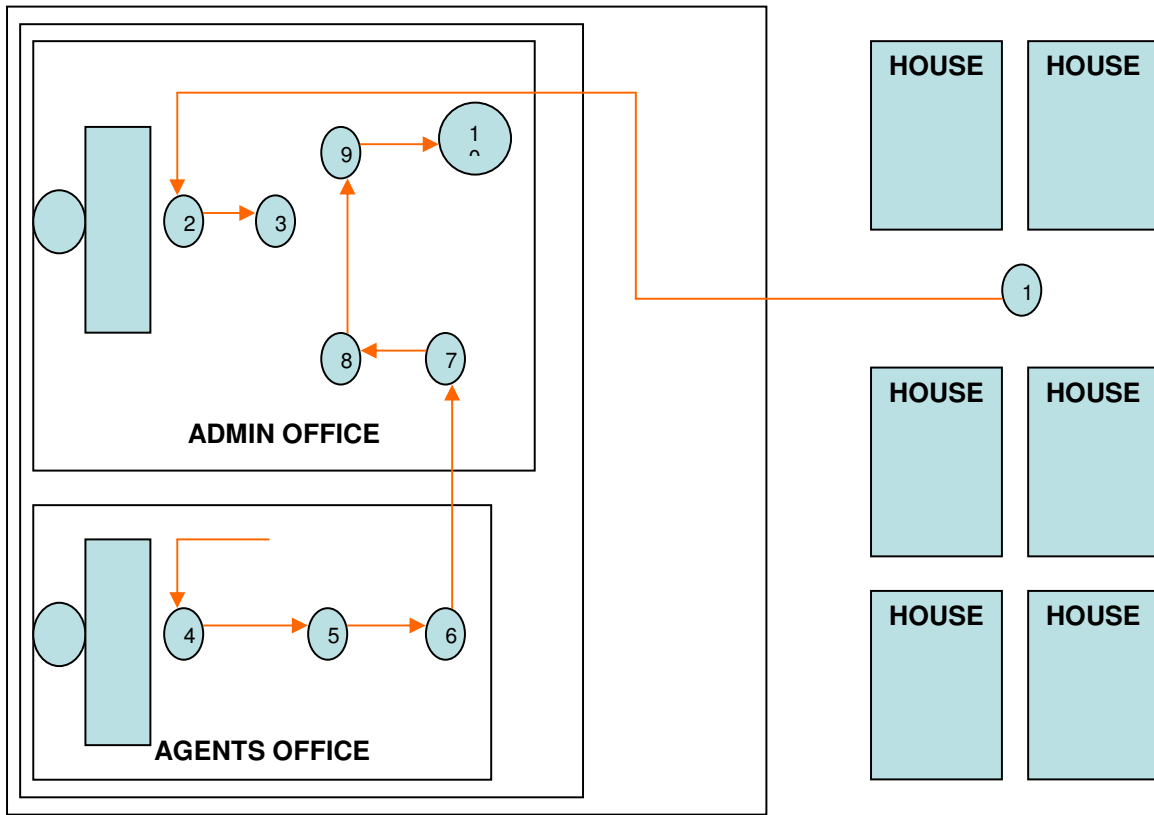
**Post Condition:**

1. The buyer has his/her own lot/house.
2. Omico Corporation will have increase in clients.
3. Sta. Rosa Homeowners will increase.

**PROCESS VS CYCLE TIME**

<b>ACTIVITIES</b>	<b>ACTUAL TIME (MINS)</b>	<b>TARGET TIME (MINS)</b>
1. Choose lot/house	20-30	15
2. Prepare computation sheet	10	5
3. Fill out information sheet	15	10
4. Check and sign BIS	10	5
5. Explain payment's and schedule	15	10
6. Signs RA	5	3
7. Forwards copy to administrative assistant, pay reservation fee.	15	10
8. Receives reservation fee, issues receipt and deposit money in the bank	20	10
9. Gives RA copy	5	3
10. Checks and monitors Buyer's payments	*CANNOT BE CALCULATED *MONITOR EVERY PAYMENT	*CANNOT BE CALCULATED *MONITOR EVERY PAYMENT

# GEOGRAPHICAL FLOWCHART



### III. Chapter 3

#### Table of Recommendations

Problem/s to be Addressed	Recommended Change Needed to Improve	Activities Affected by Changes
<p>&gt; Manual encoding of buyer's information</p>	<p>&gt; A more systematized and organized way to compile and encode the buyers' information.</p>	<p>&gt; Ordinarily after buyer signs CRA contract, a new activity is added wherein the employee opens Buyers' Account and Project Sales Monitoring Systems (BAPSMS), which will be linked to OMICO's Main System (server) and the Buyers (thru Internet) themselves as well.</p>
<p>&gt; Manual encoding of sales record</p>	<p>&gt; A faster, more precise way for a buyer to view his/her updated billing information via the Internet</p>	<p>&gt; From just merely compiling billing statements thru file folders, a storage database will be added where the employee will input the buyer's account information either thru the Internet, for buyers, or inside Omico's server, for the employees who need the information.</p>
<p>&gt; Possible understatement of billings to client thus resulting in possible lost revenue.</p>	<p>&gt; A more accurate and contact collection of information kept up to date the second a transaction has been made</p>	<p>&gt; The process where billings are calculated from Omico's point of view will be innovated, such that the buyers will be able to see</p>

		<p>how each calculation was done, when it was done exactly, and other relevant data which is sure to be stored in both Omico's servers and the Internet which will both be added an anti-hacking and anti-virus application for security purposes.</p>
--	--	--

## **Benchmarking**

One of Omico Corporation's closest direct competitors in Sta. Rosa, Nueva Ecija is Planters DB Properties, Inc. It has been very active in developing communities in Bulacan, Rizal, Batangas, Metro Manila, and of course, Nueva Ecija. Planters DB Properties has reached a wide array of markets through brand names like Milflora Homes and Villas, Primavera Homes and Villas and Paseo de San Roque. The promises Planters DB Properties has given to the people are smart and flexible house designs, excellent amenities, strategic locations, competitive pricing and enduring social values that the average family is known to value. Their mission is to uplift lives thru quality homes and well planned communities for middle-income families in strategic urban areas, while their vision is to be the major player in the real estate industry, establishing presence in all strategic urban areas.

Another competitor Omico Corporation faces in their Sta. Rosa, Nueva Ecija project is DF Homes. DF Homes has already made its name in Cavite and Batangas, with cheap value and good quality as its motto.

<b>Process</b>	<b>DF Homes</b>	<b>Planters DB Properties, Inc.</b>	<b>Omico Corporation</b>
Number of Customers *	100	1200	1000
Number of Transactions Per Month *	1-2	6-8	5-7
Number of Branches (Local Office/s) *	1	2	2
Type of Information System	Semi-Automated	Computer-Based Information System	Semi-Automated
Number of Past Successful Projects Executed	2	11	7
Accuracy in Clerical Operations	90% **	98% ***	95% **
Information Processing Pace	85% **	98% ***	90% **
Storage of Buyers' Reports	Sorted by Year, then Month, and in Alphabetical Order; Manually in File Cabinet	Sorted by Year, then Month, and in Alphabetical Order; Encoded in Company's Local Area Network	Sorted by Year, then Month, and in Alphabetical Order; Manually in File Cabinet
Clientele Monitoring of Payments	Informed by Developer Thru Phone Call	Informed by Developer Thru Phone Call	Informed by Developer Thru Phone Call
Available Financing	In-House, HDMF Loan, Bank Loan	In-House, HDMF Loan, Bank Loan	In-House, HDMF Loan, Bank Loan

Legend:

\* - in their respective Sta. Rosa, Nueva Ecija divisions

\*\* - due to the application of the manual information system and the limited number of local office/s

\*\*\* - due to the application of computer-based application system and the limited number of local office/s

## **Streamlining**

The Buyers' Account and Project Sales Monitoring System aims to resolve the problem of the Omico Company in keeping their system organized. This proposed system used tools to thoroughly understand the how the systems could effectively and efficiently create a positive change in its environment.

Types of methods used in the proposed system:

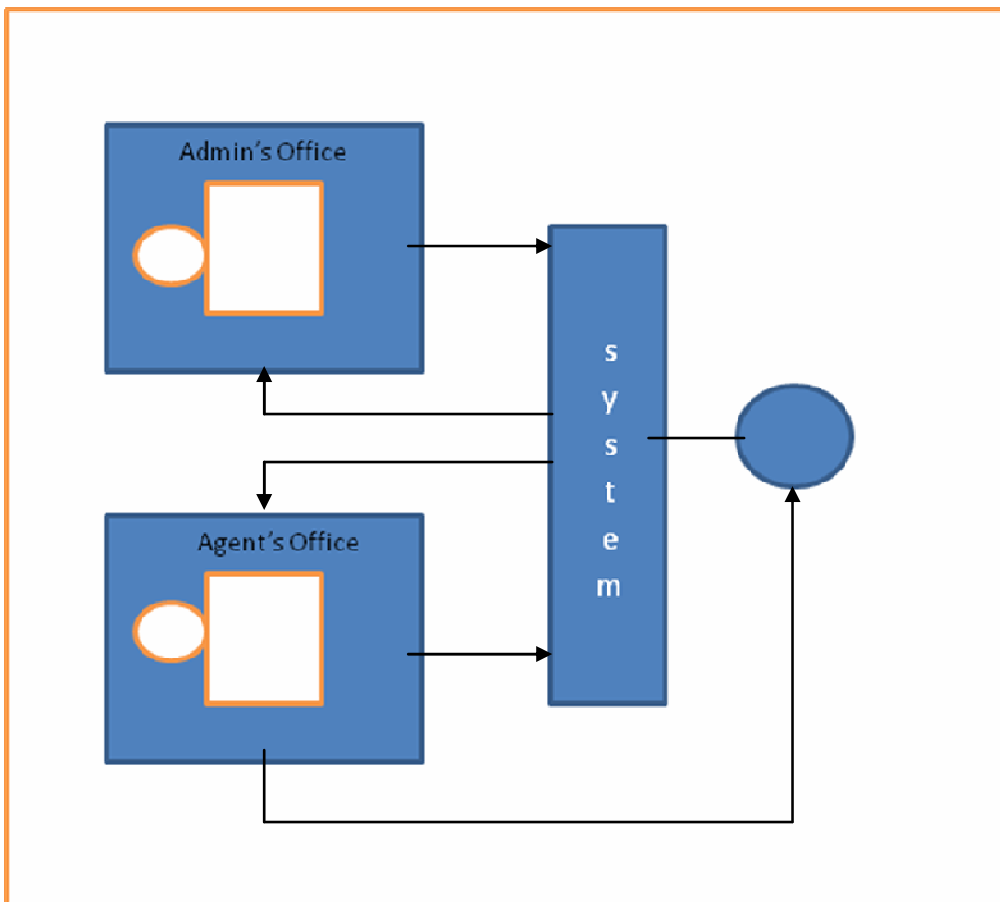
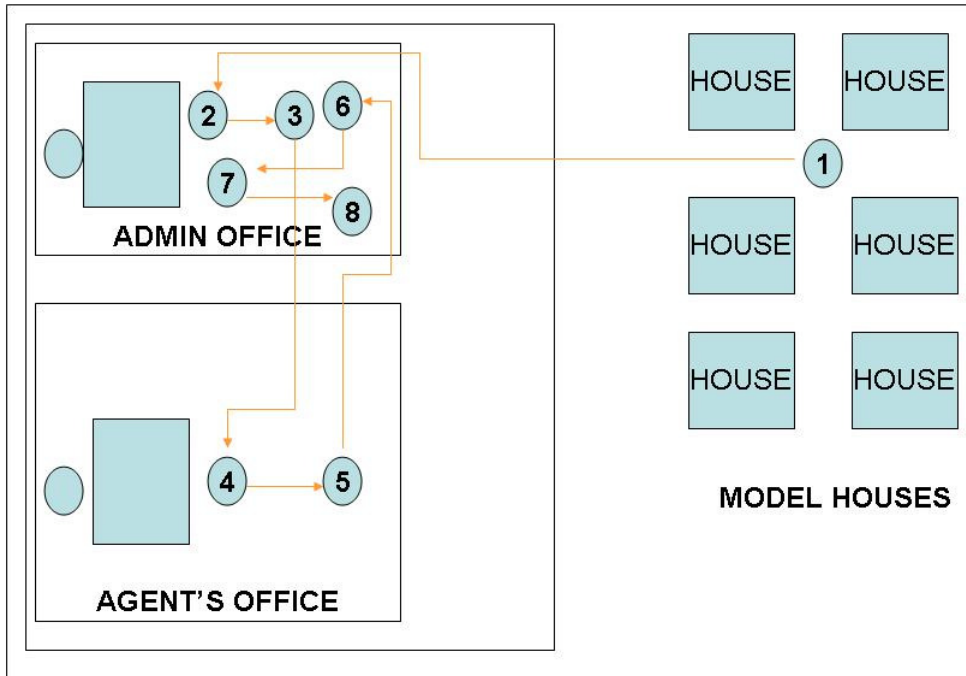
1. Simplification Activities

One of the methods used to improve on the business process of Omico Company. This method is used in the proposed system to reduce the amount of complexity and handling, leading to fewer tasks and stages. The system would provide automatic computation for issuance of buyer's quotation or computation sheet instead of producing additional copies of financial transaction and agreements. Also, the system would automatically encode the buyer's detailed information to eliminate the process of manually encoding the buyer's accounts. The account master file can be accessed in BPSMS by the Administrative Assistant to easily generate standard reports of the sales transaction in the Sta. Rosa Homes Project. Furthermore the system provides an automated array of data and monitors the buyer and agent's accounts of Omico Company to ensure an effective control in handling the sales transaction of Sta. Rosa Homes Project.

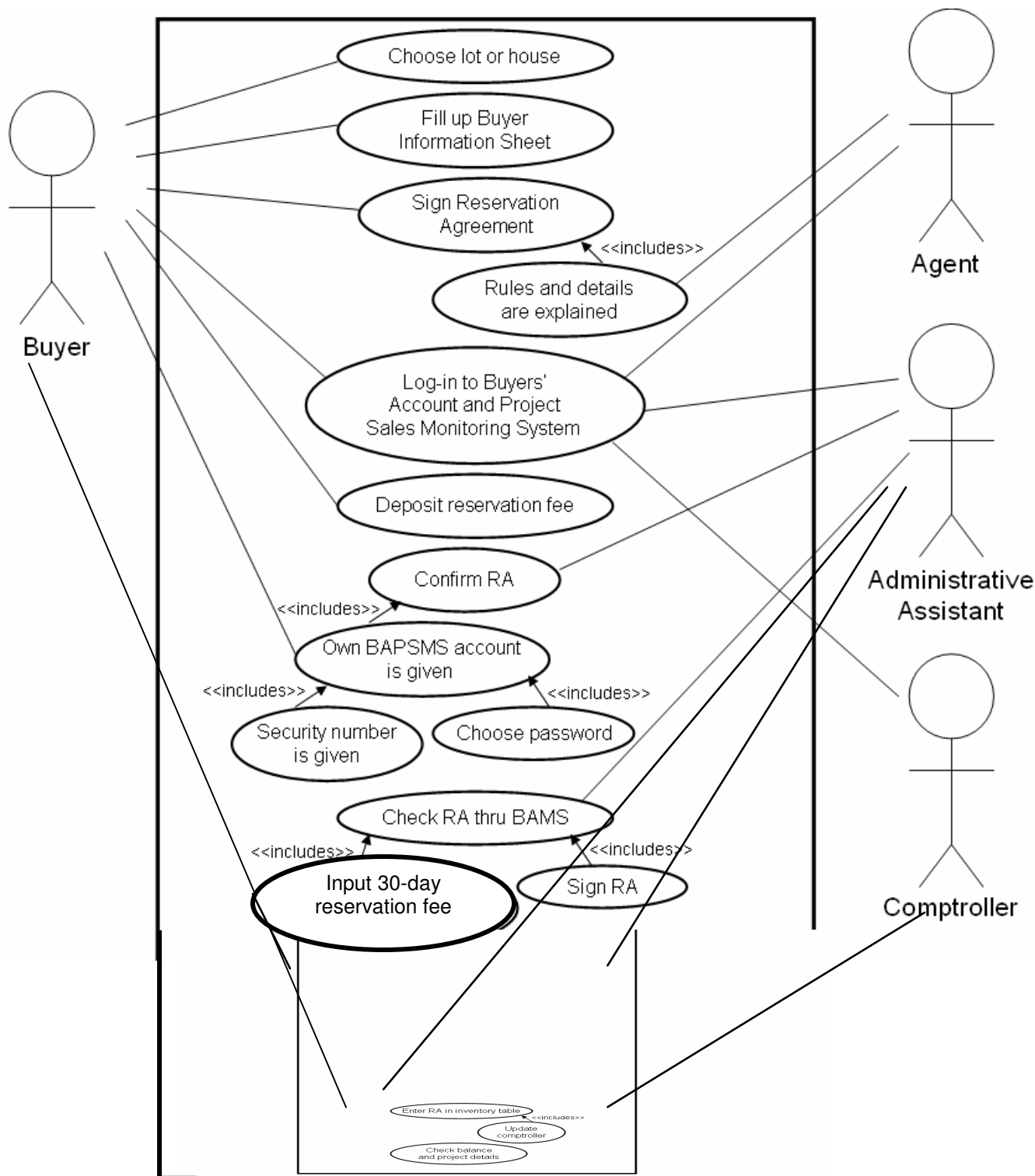
2. Process Cycle-time Reduction

This method is used to identify the activities that slow down the Reservation Agreement process in the Sta. Rosa Homes Project of Omico Company. The system organizes the data and provides a clear view of the inventory status. Moreover, the system automatically prompts the user for updates; which reduces interruption and improve on timing.





**Use Case Diagrams of The Proposed System**



**Identification Summary:**

Title: Processing Reservation Agreements using Buyers' Account and Project Sales Monitoring

## System

Summary: This use case shows the process of Reservation Agreements using Buyers' Account and Project Sales Monitoring System

Actors: Buyer, Employee, Administrative Assistant

Creation Date: Nov. 6, 2008

Date of Update: --

Version: 1.1

Persons in-charge: Buyson, Carlos, Reyes, Dela Rosa

## Flow of Events

Pre-Condition:

6. The Omico Office must be open.
7. Buyers' Account and Project Sales Monitoring System must be connected to server
8. There must be availability of lot/house
9. There must be available RA forms
10. Buyer must have sufficient money to pay reservation fee.

Main Success Scenario:

1. Buyer chooses lot/ house.
2. Agent confirms availability of lot/ house.
3. Buyer fills-up Buyer Information Sheet ( BIS )
4. Agent explains payment schedule and submission deadlines of buyer's documentary requirements.
5. Buyer signs Reservation Agreements (RA)
6. Agent opens BAPSMS, which will be linked to OMICO's Main System (server) and the Buyer (thru Internet)
7. Agent logs-in to Buyers' Account and Project Sales Monitoring System (BAPSMS)
8. Buyer deposits reservation fee.(P10,000)
9. Agent issues Official Receipt.
10. Agent inputs O.R. number, along with buyer's account name to BAPSMS. The transaction is recorded and is seen at BAPSMS.
11. Buyer inputs new password, security number and signature for account confirmation.
12. Administrative Assistant checks RA thru BAPSMS
13. Administrative Assistant signs RA on behalf of OMICO and sends copy to Buyer.
14. Administrative Assistant inputs 30-day limit for full payment reservation fee.
15. BAPSMS will create a new record on the latest RA.
16. Administrative Assistant enters RA in inventory table and sends update to comptroller.
17. The person in charge of BAPSMS will keep notify server for pending RA records and sends notification to buyer thru internet for remaining balance.

18. If buyer exceeds to limit and fails to comply with requirements BAPSMS will notify Comptroller about the cancellation and re-opening of unit.
19. The agent is notified by phone on the non-compliance of their buyer. Buyer's account in BAPSMS is cancelled.
20. Comptroller will issue memo from BPSMS canceling and re-opening the unit reserved with/ without price adjustment to all concerned.

**Alternative Sequence:**

A1: The buyer comes to Omico Office during lunch break (temporary)

\*The buyer can wait or come back when the break is done.

A2: The buyer has incomplete requirements (temporary)

\*The buyer can come back again to bring the complete files/requirements that are needed.

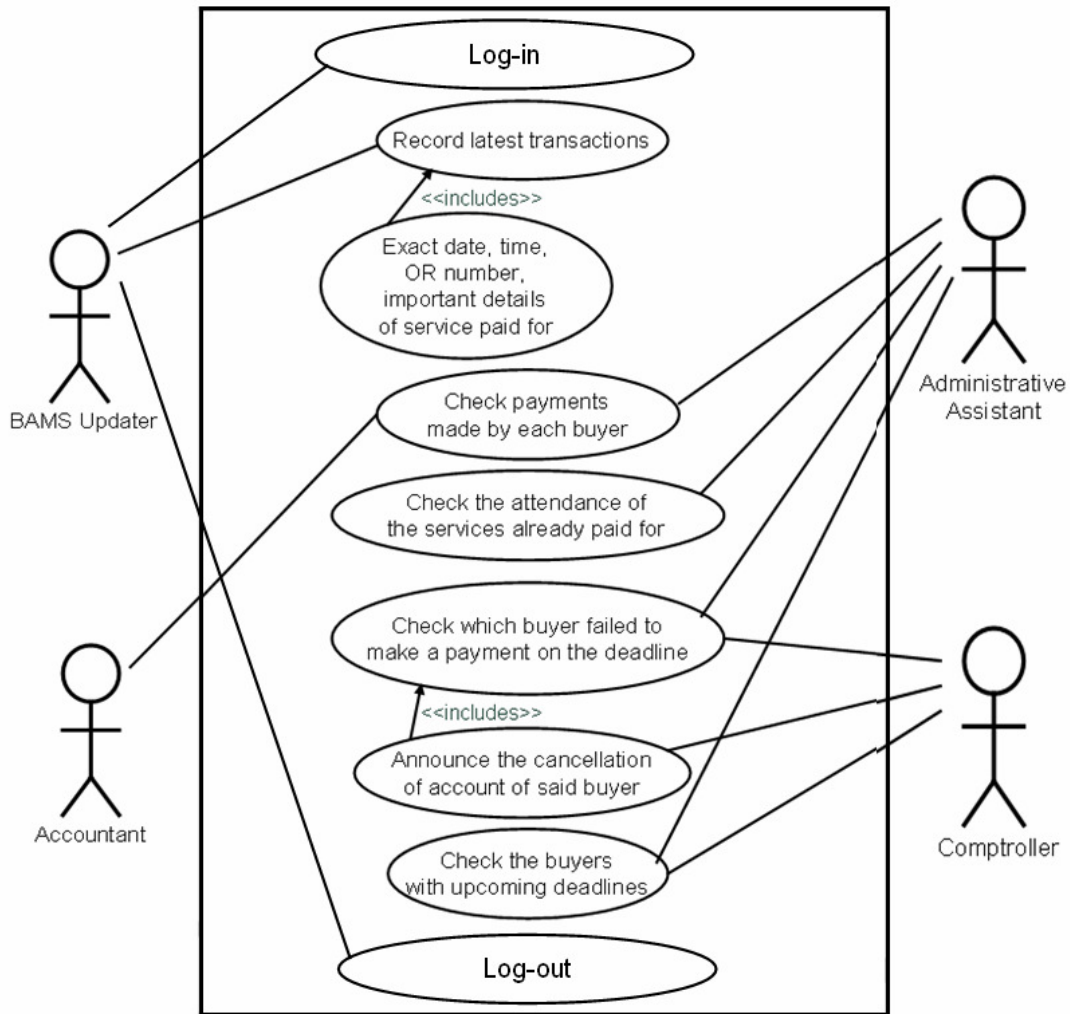
**Error Sequence:**

E1: The buyer has incomplete/invalid requirements. (Use-case fails)

E2: The buyer has insufficient amount of money. (Use-case fails)

E3: The buyer fails to comply with the deadline for full reservation. (Use- case fails)

E5. Buyers' Account and Project Sales Monitoring Systems is not connected to server  
(Use case fails)



**Identification Summary:**

Title: Buyers' Account and Project Sales Monitoring System via LAN

Summary: This use case shows the processes to maintain and use Buyers' Account and Project Sales Monitoring System via LAN.

Actors: BAPSMS Updater, Accountant, Comptroller, Administrative Assistant

Creation Date: August 2, 2008

Date of Update: August 2, 2008

Version: 1.1

Persons in-charge: Buyson, Carlos, Reyes, Dela Rosa

**Flow of Events**

Pre-Condition:

- 11. The actors must have a personal computer or laptop connected to each server.

12. There must be BAPSMS installed in each actor's computer.

**Main Success Scenario:**

21. BAPSMS Updater logs-in the BAPSMS via LAN.
22. BAPSMS Updater encodes the latest transactions.
23. Administrative Assistant checks the buyers' accounts.
24. Administrative Assistant checks buyers who have bills with upcoming deadlines.
25. Comptroller cancels account of buyer who did not pay on or before the deadline.

**Alternative Sequence:**

A1: The BAPSMS Updater encoded the wrong information (temporary)

\*The BAPSMS Updater can change his/her mistake ASAP.

A2: The BAPSMS Updater encoded an invalid password/username (temporary)

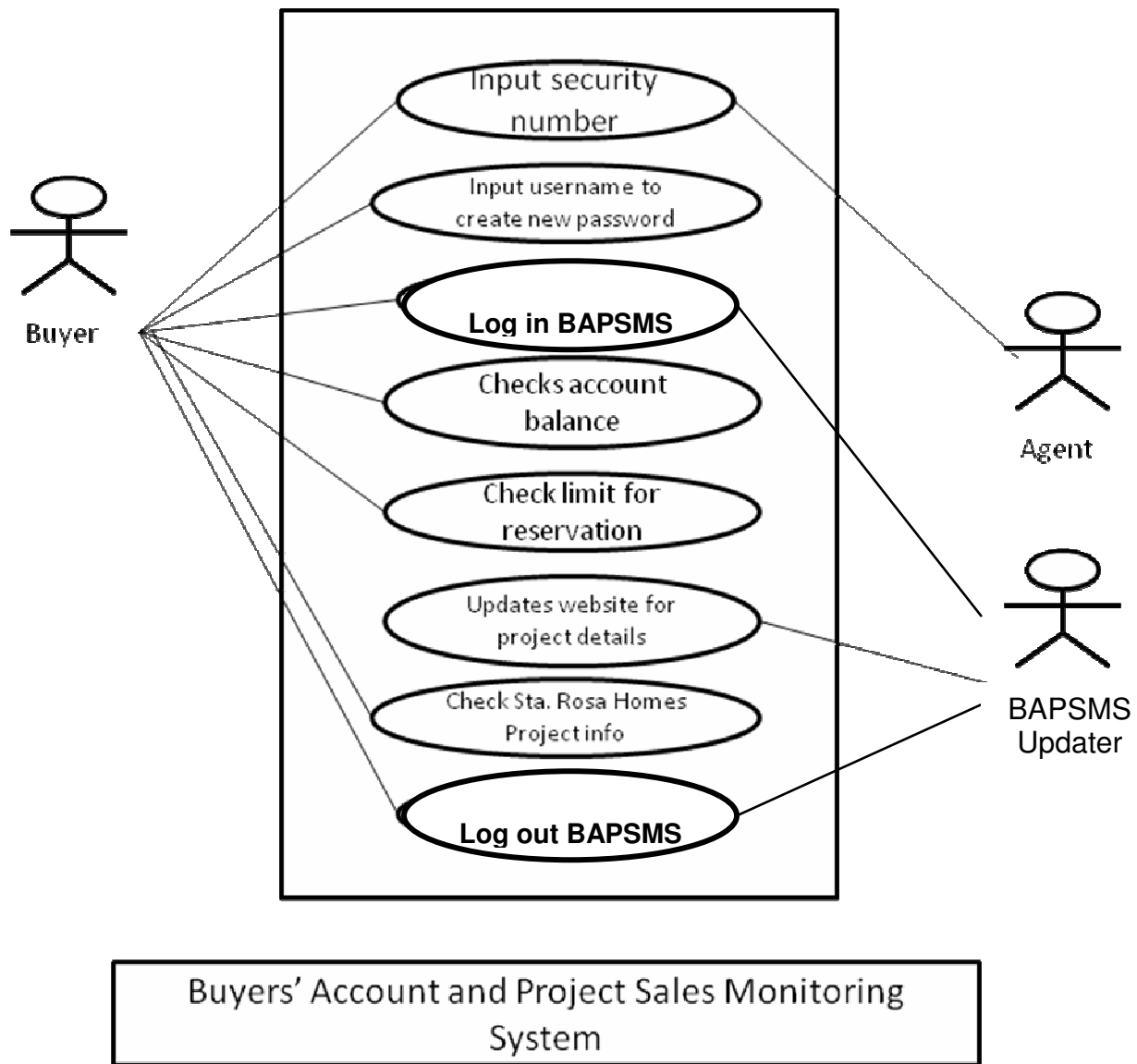
\*The computer will notify the BAPSMS Updater that the password/username is incorrect.

**Error Sequence:**

E1: A hard-drive erasing virus enters the system when the anti-virus is turned off. (Use-case fails)

E2: The computer the actor is using does not work. (Use-case fails)

E3: The computer the BAPSMS Updater is using does not have a keyboard or an on-screen keyboard. (Use-case fails)



**Identification Summary:**

**Title:** Buyers' Account and Project Sales Monitoring Systems (BPSMS) via Internet

**Summary:** This Use Case diagram shows the process on how the buyer checks the account and new updates from Omico Company

**Actors:** Buyer, BPSMS updater, Agent

**Creation Date:** August 18, 2008    **Date of Update:** --

**Version:** 1.1

**Persons in Charge:** Buyson, Carlos, Dela Rosa, Reyes

**Flow of Events:**

**Preconditions:**

- 1.) The Omico office must be open.

- 2.) There must be an employee to serve the buyers.
- 3.) The buyer must have internet access.
- 4.) The buyer must have sufficient money to pay the amount due.
- 5.) Buyer must have the account username given by the agent.
- 6.) Buyer must have security number given by the agent.

**Main Success Scenario:**

- 1) Buyer inputs security number given by agent for account activation.
- 2) Buyer uses account username to create new password
- 3) Buyer logs in to BPSMS.
- 4) Buyer checks account balance
- 5) Buyer checks limit for full reservation
- 6) BPSMS updater, updates website on project details.
- 7) Buyer checks Sta. Rosa Homes Project information.
- 8) Buyer logs out BPSMS

**Alternative Sequence:**

A1: Omico website expires (temporary)

\*The buyer logs in BPSMS.

Scenario goes back to point 1.

A2: Invalid entry of username / password/ security number

\*BPSMS informs buyer that either password or username is incorrect until you type the right one.

**Error Sequence:**

E1: The buyer did not pay reservation fee. (Use-case fails)

E2: The buyer doesn't have enough money. (Use-case fails)

E3: The buyer fails to comply with the deadline for full reservation. (Use-case fails)

**Post Condition:**

1. The buyer has his/her own lot/house.
2. The buyer can fully access website.
3. The buyer can easily now the updates and project details.
4. The buyer can easily contact Omico Company.
5. Omico Corporation will have increase in clients.
6. Sta. Rosa Homeowners will increase.



## Glossary

In this paper, unless the context otherwise requires, the following words or expressions shall have the following meanings:

“OM”	-	Omico Corporation
“PSE“	-	Philippine Stock Exchange
“SEC”	-	Securities and Exchange Commission
“RA”	-	Reservation Agreement
“BIS”	-	Buyers Information Sheet
“BAPSMS”	-	Buyers’ Account and Project Sales Monitoring System

# Appendices

## Existing Forms and Reports



## **References:**

- <http://www.pse.com.ph/html/ListedCompanies/listedcompanyinfo.jsp?securitySymbol=OM>
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- **CASE STUDIES**

- Case Study # 1-32

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- URL in [www.amazon.com](http://www.amazon.com): [http://www.amazon.com/Founders-Work-Stories-Startups-Problem-Solution/dp/1430210788/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1219636300&sr=1-1](http://www.amazon.com/Founders-Work-Stories-Startups-Problem-Solution/dp/1430210788/ref=sr_1_1?ie=UTF8&s=books&qid=1219636300&sr=1-1)

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